

d) that following are the responses:

1. January, 1951; Ohio; Sam Simon, P.O. Box 218, Ashtabula, Ohio 44004

2. Acme was operator of facility at 2110 State Road, Ashtabula Township, Ashtabula County, Ohio 44004

Delta Associates Limited, an Ohio limited partnership association, is the owner of the facility at 2110 State Road, Ashtabula Township, Ashtabula County, Ohio 44004

Complete Legal Description of the property is attached as "Exhibit A" and made a part of this response.

3. Not applicable.

4. Not applicable.

5. Since June, 1974, Acme has been operating under an oral month-to-month Lease with Delta Associates Limited; the lease is a triple-net lease with Acme providing all maintenance and care of the facility, paying all taxes and insurance costs.

6. Sam Simon is the plant manager and has been since Acme took over the facility in June of 1974. Acme has no production manager or plant engineer. Mr. Simon is the person responding to numbered Request 1 through 35, inclusive.

7. The facility was owned by the United States Government in the late 1940's, and was at that time operated by National Carbide Corporation.

8. June of 1974.

9. The purchasing, sorting and preparation of scrap for shipment to foundaries and steel mills.

10. Steel, cast iron, non-ferrous metals; to this affiant's knowledge, hazardous substances have not nor are they contained in any such materials.

11. Acme was advised that oil from the property was going into Fields Brook. Investigation determined that the possible source was the oil from a bailer that had a bad seal; the situation was immediately corrected.

12. From the 2110 State Road, Ashtabula facility operated by Acme: a) National Carbide Corp. b) Made carbide; had electric furnaces. c) Not known. d) Not known.

13. This affiant has no knowledge of any contamination of Fields Brook.

14. a) Five storm sewers within the property remove surface drainage; all of the same empty into one (1) thirty-six inch

(36") line that then goes into Fields Brook at the State Road bridge, north of Middle Road. All surface drainage first enters a pond interceptor located within the yard before discharge goes into Fields Brook. A private independent laboratory tests the out-fall from the interceptor each month; a report is then given to Ohio EPA, Columbus, Ohio each month.

b) Indirect.

c) We have no such information.

15. Yes. Ohio EPA, Permit No. 31N00093*AD.

16. Acme does not, nor has it stored any hazardous wastes or hazardous substances at the facility.

17. Acme has no reclamation process for the practice described. Acme does not accumulate materials of any kind or nature in the form of still bottoms, sludges or other non-reclaimed materials.

18. Acme does not have any incineration process for disposal of wastes; Acme has no waste to dispose of. To the knowledge of this Affiant, Acme has never received or disposed of PCB transformers.

19. Your agency has been misinformed. To my knowledge, Acme has never received PCB transformers for disposal.

20. No.

21. There are no french drains. There is a sewer line from the office-administration building to a sewer septic system.

CORRECTIVE ACTION
OHIO EPA



**POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT**

I. IDENTIFICATION
01 STATE **OH** 02 SITE NUMBER **0017511031**

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) ACME SCRAP METAL		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 2110 STATE ROAD			
03 CITY ASHTABULA	04 STATE OH	05 ZIP CODE 44004	06 COUNTY ASHTABULA	07 COUNTY CODE 07	08 CONG DIST 11
09 COORDINATES LATITUDE 41° 53' 45.0" LONGITUDE 080° 46' 00.0"		ASHTABULA NORTH QUADRANGLE 7.5'			
10 DIRECTIONS TO SITE (Starting from nearest public road) FROM HWY 11 proceed North on STATE ROAD to MIDDLE ROAD. SITE IS AT THIS INTERSECTION ON THE RIGHT.					

III. RESPONSIBLE PARTIES

01 OWNER (if known) SAM SIMON		02 STREET (Business, mailing, residential) 2110 STATE ROAD // PO Box 218			
03 CITY ASHTABULA	04 STATE OH	05 ZIP CODE 44004	06 TELEPHONE NUMBER (216) 998-2820		
07 OPERATOR (if different from owner) same as above		08 STREET (Business, mailing, residential)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ()		

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name: _____)
☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify: _____) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ____/____/____ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (RCRA 103) DATE RECEIVED: ____/____/____ MONTH DAY YEAR ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE **03/30/82** MONTH DAY YEAR
☐ NO

BY (Check all that apply)
☒ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify: _____)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
 BEGINNING YEAR **1950** | ENDING YEAR **present** ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
OILY WASTE (TOXIC/IGNITABLE/PERSISTENT)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
**GROUNDWATER (ENVIRONMENT)
 SURFACE WATER (POPULATION/ENVIRONMENT)
 AIR (POPULATION/ENVIRONMENT)
 DIRECT CONTACT (POPULATION)**

V. PRIORITY ASSESSMENT *FIT*

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspection on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT GARY GIFFARD	02 OF (Agency/Organization) OHIO EPA (NEDO) TWINSBURG	03 TELEPHONE NUMBER (216) 425-9171
04 PERSON RESPONSIBLE FOR ASSESSMENT MARY JANE RIPP	05 AGENCY U.S. EPA	06 ORGANIZATION ECOTOX + ENVIRONMENT REGION II
	07 TELEPHONE NUMBER (312) 663-9415	08 DATE 7/10/85 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
OH 0017511031

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Damage may have occurred during fires, and also from oil spills on-site and around Fields Brook outfall. Additional damage occurred off-site with air contamination during fires.

01 ☒ K. DAMAGE TO FAUNA 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
Animals migrating across site could come into contact with contaminants. Fish in Fields Brook could come in contact with oil. Appears to be small wetland south of plant. Airborne dispersal of contaminants, a possibility.

01 ☒ L. CONTAMINATION OF FOOD CHAIN 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Airborne dispersal of contaminants a possibility. Oils could contaminate fish in waterways (Fields Brook + Ashtabula River). OOH/CEPA Risk Advisory is an effect for Ashtabula River.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES 02 ☒ OBSERVED (DATE: 1/14/82) ☐ POTENTIAL ☐ ALLEGED
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: 35,979 04 NARRATIVE DESCRIPTION
Numerous oil spills on-site and into Fields Brook from outfall. PCB capacitors lying half buried on-site.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
unknown

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 ☒ OBSERVED (DATE: 3-30-82) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Rhodamine B dye introduced into sewer + established that Acme discharge travels directly to Fields Brook. Sampled sewers and found PCB contamination.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING 02 ☒ OBSERVED (DATE: 6-10-81) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Truck backed up to Fields Brook at State Rd with 55-gallon drums in back with hoses hanging from them. Truck pulled away when complainant was watching and drove into Acme Scrap. No plates on truck.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

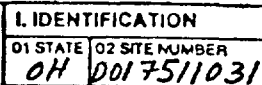
III. TOTAL POPULATION POTENTIALLY AFFECTED: 35,979

IV. COMMENTS

An oil retention lagoon was installed in 1982 to capture oils from site drainage. Lagoon appears to be helping.

V. SOURCES OF INFORMATION (Cite specific references, e.g., State files, sample analysis, reports)

see attached sources of information



☐ I. HIGHLY VOLATILE
☐ J. EXPLOSIVE
☐ K. REACTIVE
☐ L. INCOMPATIBLE
☐ M. NOT APPLICABLE

EPA FORM 2070-12 (7-81)



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
04 0017511031

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: ~152

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

No observed releases to groundwater, no monitoring wells on site. Site geology consists of 0'-60' of glacial till (poorly drained sandy clays), below is 1360' of Devonian shale. The ~40 residential wells are developed in shale and yield 1-3 GPM. Local residents and industries use Lake Erie water. Potential for oils to seep into till, but is highly unlikely wastes will migrate to and thru highly impermeable shale.

01 ☒ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 0

02 ☒ OBSERVED (DATE: 1981, 1982) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Local residents and industries use Lake Erie water. Surface water intake is beyond 3-mile radius; therefore, population affected is zero. Samples collected have confirmed PCB contamination in oils taken at outfall in Fields Brook. Dye introduced to trace surface water from site to Fields Brook confirmed route. Acome has boom in Fields Brook to capture oils from outfall, but not maintained properly; therefore breakdowns and oil escapes.

01 ☒ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: 35,979

02 ☐ OBSERVED (DATE: 1976, 1978, 1981) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

On many occasions, transformer fires have occurred at Acome, both planned and accidental. PCB contaminated oils have been involved in these fires. Ashbridge Township Fire Company and OETA have responded to fires. These fires could potentially release toxic substances and be carried thru airborne dispersal.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: 12,112

02 ☒ OBSERVED (DATE: 1976, 1978, 1981) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Numerous fires and open burning violations. Fires began by oil from transformer ignited by a cutting torch. See Section C above.

01 ☒ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: 3028

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Unknown if fence surrounds facility or if security guard present.

01 ☒ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: ~ one

02 ☒ OBSERVED (DATE: 3-30-82) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

analytical data shows ^(ACROSS) soil contaminated with PCB's at one sample location onsite. Many oil stained areas present on-site, and also present near outfall at Fields Brook.

01 ☒ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 152

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

see Sections A + B above.

01 ☒ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: 44

02 ☐ OBSERVED (DATE: 1976, 78, 81) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Unknown if workers wear protective clothing or use protective equipment. Worker using cutting torch accidentally ignited PCB oil in transformer. Workers could have been affected by air emissions.

01 ☒ I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: 35,979

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

During burns and fires, population could be affected by contaminants emitted. PCB contamination in Fields Brook could potentially harm people fishing or using waterways for other recreational purposes.

CORRECTIVE ACTION
OHIO EPA



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	051751031

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)		02 STREET, ROUTE NO., OR SPECIFIC LOCATION/IDENTIFIER			
ACME SCRAP METAL		2101 STATE ROAD			
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
ASHTABULA	OH	44004	ASHTABULA	003	11
09 COORDINATES LATITUDE		LONGITUDE			
41° 41' 15" N		82° 42' 24" W		ASHTABULA NORTH QUADRANGLE	
10 DIRECTIONS TO SITE (Starting from nearest public road)					
FROM US 30 NORTH ON STATE RD TO MIDDLE RD. SITE 1, AT THE INTERSECTION.					

III. RESPONSIBLE PARTIES

01 OWNER (if known)		02 STREET (Business, making residential)			
ACME SCRAP METAL		2101 STATE ROAD			
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER		
ASHTABULA	OH	44004	(216) 999-2900		
07 OPERATOR (if known and different from owner)		08 STREET (Business, making residential)			
NONE					
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER		
			()		

13 TYPE OF OWNERSHIP (Check one)

- ☒ A PRIVATE ☐ B FEDERAL: _____ (Agency name) ☐ C STATE ☐ D COUNTY ☐ E MUNICIPAL
☐ F OTHER: _____ (Specify) ☐ G UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

- ☐ A. RCRA 3001 DATE RECEIVED: _____ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: _____ MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION WINTER		BY (Check all that apply)			
<input checked="" type="checkbox"/> YES DATE 1/1/83	<input type="checkbox"/> A. EPA <input checked="" type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR				
<input type="checkbox"/> NO	<input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify)				
CONTRACTOR NAME(S): _____					

02 SITE STATUS (Check one)		03 YEARS OF OPERATION	
<input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN	BEGINNING YEAR: UK ENDING YEAR: PRESENT		<input type="checkbox"/> UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
 HEAVY METALS (TOXIC/PERSISTENT)
 PCB (TOXIC/PERSISTENT) - FROM SCRAP TRANSFORMERS & CAPACITORS
 IN OILY WASTE

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
 SURFACE WATER (ENVIRONMENT/POPULATION)
 GROUND WATER (ENVIRONMENT/POPULATION)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT		02 OF (Agency/Organization)		03 TELEPHONE NUMBER	
GARY GIFFORD		OHIO EPA (NEDO) TWINSBURG		(216) 425-9171	
04 PERSON RESPONSIBLE FOR ASSESSMENT		05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
				()	1/1/83 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

OH D017511231

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <1000 04 NARRATIVE DESCRIPTION

THERE ARE SOME PRIVATE WELLS WITHIN 3 MILES OF CREEK WHICH MAY BE CONTAMINATED FROM NON-POINT SOURCE OF CREEK WITHIN WATER TABLE. HOMES ON CORK RD. ~ 1 MILE OR SO FROM SITE ARE ON WELL WATER

01 ☒ B SURFACE WATER CONTAMINATION 02 ☒ OBSERVED (DATE 1997) ☒ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~2000 04 NARRATIVE DESCRIPTION

LEACHATE AND RUNOFF ARE AFFECTING FIELDS ALONG CREEK THAT BORDERS SITE.

01 ☒ C CONTAMINATION OF AIR 02 ☒ OBSERVED (DATE 1997) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: >1000 04 NARRATIVE DESCRIPTION

READINGS OF CHLORINATED ORGANICS HAVE BEEN ABOVE BACKGROUND LEVELS.

01 ☐ D FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ E DIRECT CONTACT 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

DEPENDS ON SECURITY AROUND SITE

01 ☒ F CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: ~5 (ACRES) 04 NARRATIVE DESCRIPTION

LEACHATE AND RUNOFF WOULD AFFECT SOILS BOTH ON SITE AND ALONG FIELDS BROOK.

01 ☒ G DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <1000 04 NARRATIVE DESCRIPTION

DRINKING SOURCE IS BASICALLY FROM LAKE ERIE BUT INTAKE IS MORE THAN 3 MILES AWAY. HOWEVER SOME WELL WATER IS USED FOR DRINKING. (SEE GROUND-WATER CONTAMINATION - A.)

WATER PLANT # (216) 964-3777

01 ☒ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: >15 04 NARRATIVE DESCRIPTION

POSSIBLE EFFECT TO THOSE WORKERS WHO WORKED AROUND DRUMS, TANKS, OR OTHER SURFACE IMPOUNDMENTS.

01 ☒ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: >5000 04 NARRATIVE DESCRIPTION

POSSIBLE EXPOSURE FROM WELL WATER AND PUBLIC ACCESS TO FIELDS BROOK.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
34	021741133

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

(SEE FOOD CHAIN - L)

01 ☒ K. DAMAGE TO FAUNA 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

(SEE FOOD CHAIN - L)

01 ☒ L. CONTAMINATION OF FOOD CHAIN 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

POSSIBLE EFFECTS TO AQUATIC ECOSYSTEM OF FIELDS BROOK AND
ACHTAULAH RIVER.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
(Soils, runoff, standing liquids, leaking drums)

03 POPULATION POTENTIALLY AFFECTED: >100

04 NARRATIVE DESCRIPTION

(SEE SURFACE WATER - R AND CONTAMINATION OF SOIL - F)

01 ☐ N. DAMAGE TO OFFSITE PROPERTY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 ☒ OBSERVED (DATE: 1980) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION

COMPANY HAS BEEN ASSOCIATED WITH DISCHARGING PCB CONTAMINATED OIL
TO STORM DRAIN.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING 02 ☒ OBSERVED (DATE: 1979) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION

STATE CONTENDS DISPOSAL AND LEACHATE TO CREEK WAS UN-
AUTHORIZED.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: > 5000

IV. COMMENTS

THE COMPANY HAS SET UP AN OIL/WATER SEPARATER IN THE DITCH OF
QUESTION THAT IS RECEIVING CONTAMINATED WASTE. ACME SCRAP IS CONSIDERED
BY OHIO EPA TO BE THE WORST POLLUTER TO FIELDS BROOK. THEY REFUSE TO
COOPERATE IN THE CLEANUP. HOWEVER THEY ARE INCLUDED IN THE SUPERFUND ACTIVITY WIT.

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports) OR WITHOUT THEIR COOPERATION.

SAME AS PART 2. SECTION VI.

Page 3

I mentioned that his attorneys may want to talk to you somewhere. I must have transposed a number because Ed mentioned a total of \$10.7 or \$10.8 million for both projects.

Preliminary data was produced to OEPA and relayed to me from Steve Tuckerman NEDO on 1/10/84. The amount of material to be removed from the entire length of Fields Brook assuming 3.8 miles long, 30' average width, 1 foot depth= 22,293 yd³. This was an estimate made by the U.S. Army Corps. There was only one sample above 50 ppm; at State Rd, in Fields Brook. At bottom of a 1' core they found about 340 ppm PCB near the Acme Scrap outfall. They also found 70 ppm aroclor 1254 by General Tire, and at mouth of Fields Brook 7.7 ppm. At Rt. 11; 6.18 ppm and at Rt. 11 upstream; 10.8 ppm, but at 1 depth 23.9 ppm. Downstream at State Rd at 1' down 33 ppm. There may be a location at State Rd. above 50 ppm. The distance of Fields Brook upstream Rt 11 to the G&W outfall is about 1 mile. About 1/3 of the sediment is located in the area above 10 ppm or about 7400 yd³.

If the same site is used for sludge disposal as the harbor sediments; then costs would be as follows:

In 1982, Olin dredged from Fields Brook 500 yd³ of sediment from 6" to 3' deep from 300' of the brook for a cost of \$50,000.

The water was charcoal treated, and the stream was returned to original grade. Based upon \$100/yd³ removal cost; the removal of 7400 yd³ of Fields Brook contaminated above 10 ppm would cost approximately \$740,000. Assuming a contingency fee of 10%; total costs would be \$814,000 for the PCB contamination of Fields Brook by G&W.

Sample Collection

Composited samples were collected at Outfall 001 using three ISCO samplers. These samplers provided water for general chemistry, metals, nutrients, phenols, organics, and bioassay analyses. In addition a single volatile organics sample was also collected at 001 and field measurements were taken twice at this outfall.

Single grab samples were collected at each of the other four sample sites including field parameters. All grab sites were sampled for general chemistry and nutrient parameters. The 002 outfall and upstream and downstream sites were sampled for fecal coliform. Phenol and metal samples were collected from the upstream, downstream and ASHCO sites. The EDO laboratory and the Central Regional Laboratory analysed all the samples in accordance with the methods listed in 40 CFR 136.3. The samples were preserved during collection and transport, and were analysed within specified holding times.

Flow Measurement

Flow was measured at Outfall 001 using the company parshall flume and recorder.

B. Permittee Participation

SCM Corporation personnel were cooperative during this inspection. Company representatives observed portions of the sampling program and were provided split samples for analyses of those constituents limited in the NPDES permit.

C. State Participation

Mark Baumgardner, OEPA - NEDO, participated in the inspection of this facility and was provided split samples for Outfalls 001 and 002.

D. General Conditions

The air temperature during the sampling was in the teens. Several inches of snow fell during the study with no appreciable effect on flows. Plant production was curtailed at 0600 on January 23, 1980. It is felt that this work stoppage had no effect on waste flows during the study since sampling ended only four hours later and the detention time in the wastewater treatment system is thirty-six hours.

8. Discussion of Survey Results

Attachment #6 are tables containing the results of the sampling done during this study. These tables contain the results of the organic scans, Ames Test and bioassay testing as well as the results of the conventional chemical analyses.

The following attachment (#7) compares these sampling results with NPDES permit limits. The company was meeting all of these limitations during this study. Despite these results, the company has had problems meeting pH limitations at Outfall 001. These excursions are due to the failure of the initial pH adjustment system to operate properly. The process wastewater is entering the settling lagoons with the pH incorrectly adjusted. After settling, the final pH adjustment system is not able to bring the pH of the effluent within permit limits. In order to prevent this problem the company has tried to fine tune the initial pH adjustment system and has spot neutralized the water in the settling ponds. The emergency holding basin has also been used to retain the wastewater until the upset condition is corrected. The water in the basin is then routed back through the treatment system prior to being discharged to Fields Brook.

U.S. Environmental Protection Agency
Region V
Surveillance & Analysis Division
Eastern District Office

Compliance Monitoring Field Report

1. Permittee Identification

The SCM Corporation
Chemical/Metallurgical Division
Glidden Pigments Group
2900 Middle Road, P. O. Box 310
Ashtabula, Ohio 44004
(216) 998-1825

NPDES Permit: OH 0000523

Receiving Streams:

Fields Brook (Ashtabula River to Lake Erie)

Responsible Official:

Mr. T. C. Gillen, Plant Manager

2. Dates of Inspection and Survey: January 22-23, 1980

3. Participants

Permittee

M. F. Wetzel, Senior Project Engineer
E. G. Esterbrook, Chemist

Ohio EPA

Mark Baumgardner, Environmental Scientist

U.S. EPA

Mark Moloney, Environmental Engineer (Author)
Philip Gehring, Leader, Field Support Team
Charles Beier, Engineering Technician
Joseph Good, General Mechanic
Roland Hartranft, Engineering Technician

4. Objective

This compliance sampling inspection was conducted pursuant to a December 19, 1979 Enforcement Division request. The purpose of this study was to determine if the discharger is meeting the requirements contained in NPDES permit OH 0000523. In addition, three special tests were performed in order to determine if any toxic or carcinogenic/mutagenic pollutants are present in the company discharge. These tests include two static bioassay tests, a scan for organic pollutants, and the Ames test.

5. Summary of Findings and Conclusions

- a. The sample results from this compliance sampling inspection show SCM to be meeting the limits contained in the NPDES permit. Company self-monitoring data and information from Ohio EPA indicates, however, the company has had problems meeting the pH limits contained in the permit.
- b. Two deficiencies were noted during this inspection regarding the SCM self-monitoring program. These were the fact that the discharger is not refrigerating the effluent sample during compositing and that an orthotolidine method is used to analyse for residual chlorine rather than the approved method (iodometric titration) indicated in 40 CFR 136.3.
- c. Based on the data collected during this study the SCM 001 discharge raises the concentrations of copper, dissolved solids and the temperature of Fields Brook above criteria in Ohio Quality Standards - Warmwater Habitat.
- d. Two organic compounds were present in the SCM discharge sample. One was a volatile organic while the other was non-volatile. The volatile organic, 1,1 Dichloroethane is a priority pollutant, and is moderately toxic. This compound, however, was also found in the field blank which makes its presence in the discharge suspect. The non-volatile organic, 1-(2 Butoxyethoxy)ethanol is not a priority pollutant.
- e. The Ames Test performed on the SCM effluent sample proved to be negative. That is, the effluent did not induce a mutagenic or carcinogenic response to test bacteria.
- f. The static fish bioassay results show no toxicity to the fathead minnow, however, the 24 and 48 hour mortality to daphnia averaged 70%.

6. Description of Permittee

A. Facility

The SCM Ashtabula Plant manufactures titanium dioxide. This material is used as a pigment in paint, paper and plastics. The facility is located on Middle Road in Ashtabula Township, Ohio, and employs about 180 people. It is operated on a 24 hour per day - 7 days per week basis. The production capacity of the plant is 27,000 tons/year. Attachment #1 shows the plant location and the location of its two discharges.

B. Process

The SCM Ashtabula facility uses the chloride process to produce titanium dioxide from impure titanium ores such as rutile and ilmenite. Attachment #2 is a flow diagram of this process. It begins with the reaction of the ore with gaseous chlorine in the presence of carbon (coke) producing liquid titanium tetrachloride. The $TiCl_4$ is purified by distillation and oxidized in a flame to TiO_2 which condenses as a fume with the evolution of chlorine. The chlorine is recycled back to be used in the initial reaction. The TiO_2 is given a chemical surface treatment to impart wettability. This involves filtration, washing and drying. The material then undergoes grinding and bagging in preparation for shipment.

C. Wastewater Treatment

Attachment #3 is a detailed diagram of the operations at the SCM Ashtabula plant. The sources of process wastewater at the facility are shown in this diagram. These sources include cooling tower blowdown, wastewater from the air pollution control scrubbers and, filtrate and washwater from the liquid solids separation area.

All the process wastewater and stormwater runoff from the plant is routed to the wastewater treatment facility shown in Attachment #4. Most of the process wastewater is acidic and flows initially to a sump where lime is added. The pH is raised to between 8.5 and 9.0. The water then flows to two 800,000 gallon retention basins for solids settling and metal precipitation. The flow to these basins from the plant is approximately a million gallons per day and thus the detention time in these basins is about 1.5 days. After passing through the two basins the wastewater flows to a flash mix tank where H_2SO_4 is added to neutralize the waste stream. The flow then passes through a parshall flume and is discharged to Fields Brook through Outfall 001. Prior to being discharged SCM occasionally augments the flow with ASHCO water in order to lower the dissolved solids concentration.

In addition to this treatment system SCM also has an emergency holding basin with a capacity of 0.8 to 1.0 million gallons in order to contain any spills at the plant. Any water detained in this basin is pumped back to the head of the retention basins.

Sanitary wastewater from SCM is treated in a package sewage treatment plant prior to being discharged to Fields Brook. The plant consists of an aeration basin and sand filters. The flow through the plant is between 3000 and 4000 gallons per day. Attachment #5 is a sketch of this facility.

D. Solid Waste Disposal

Most of the solid wastes generated at the SCM Ashtabula plant are hauled away and disposed of by Reserve Environmental Services Inc. (RES). These wastes include 5,000,000 gallons per year of waste acid (10% hydrochloric acid concentration), 3500 cubic yards per year of sludge from the settling ponds (containing 10% solids, coke and ore), and 1000 cubic yards per year of sludge from the powerhouse pond. All wastes are hauled to the RES disposal site located on LaBounty Road in Ashtabula.

The liquid wastes are neutralized and then pass through a settling basin before being stored in a 20 million gallon holding pond. RES plans to discharge the supernatant from this pond to Lake Erie if a NPDES permit can be obtained from Ohio EPA. A complete report on a March 12, 1980 inspection of the RES facility by Willie Harris of EDO has been forwarded to the Compliance Section of the Region V Enforcement Division. The reader is referred to this report for further information on the RES facility.

Rubbish from SCM is hauled away by the Niciu Trucking Company to the Doherty Landfill located on Tuttle Road in Ashtabula. The sludge from the SCM sewage treatment plant (1500 gallons per year) is hauled away by Ashtabula County Waste, Inc. and is disposed of at the Ashtabula STP.

E. Self Monitoring

Two deficiencies were noted during this inspection with regard to the company's self monitoring program. These were:

1. Presently, the discharger is not refrigerating the Outfall 001 sample during compositing. Mr. Wetzel, Company Engineer, did indicate, however, that they are planning to purchase and install a refrigerated sampler.

2. The company is currently using the orthotolidine method for the analysis of total residual chlorine instead of one of the iodometric titration methods called for in 40 CFR 136.3.

Aside from the problems noted above, SCM was in conformance with the monitoring requirements contained in the NPDES permit. A brief description of SCM's self monitoring program at its two outfalls is presented below:

Outfall 001

Flow at this outfall is measured using a 6 inch parshall flume and flow proportioned samples are collected using an automatic sampler. The parshall flume was properly installed. Continuous flow and pH measurements are recorded on strip charts. Malfunctions or a pH reading outside the permitted range trigger an audible alarm in the main plant control room. All of the 001 samples are analysed in the company laboratory. With the exception of residual chlorine, the analyses conform to 40 CFR 136.3. The parameters measured are total residual chlorine, total dissolved solids, total suspended solids, total copper, total zinc, total chromium and total iron. Sampling is conducted once per week except for flow which is continuously monitored and total iron which is analysed once per month. After sampling the composite sample is split up and analysed within several hours at the plant laboratory. The samples are reportedly analysed within specified holding times, and are refrigerated while in the lab.

Outfall 002

Grab samples are collected at this outfall once a month for suspended solids and BOD₅. These samples are taken to the City of Ashtabula immediately after being collected. Here, the samples are analysed by the City within several hours and the results are reported to SCM. Flow is estimated based on water usage.

7. Description of Compliance Monitoring Field Survey

A. USEPA Sampling Methods and Locations

Sample Sites

Samples were collected at five sites during this study. The locations of the five sites are listed below:

- a. The 001 sample point was selected downstream of the parshall flume (sample #80EM02-S01, S06-7).
- b. The 002, STP discharge, was collected at the discharge pipe near Middle Road. The pipe was submerged at the time of sampling (sample #80EM02S02).
- c. The upstream station was collected near an old sealed discharge point (sample #80EM02S03).
- d. The downstream station was sampled just above the screened culvert near the holding pond (sample #80EM02S04).
- e. The raw ASHCO water supply was sampled from a tap in the clarifier building next to the powerhouse (sample #80EM02S05).

The Ohio EPA Quarterly Non-Compliance Reports for 1979 (Attachment #8) show that the pH problems at SCM were apparently solved because the excursions ceased between May and December 1979. This is misleading, however, because during this period the discharger was monitoring pH with a single daily grab sample as required in Ohio permit E313*BD. In December 1979 the facility began to monitor pH with a continuous monitor as required in the new Ohio permit E313*CD and the pH problems began to reappear in January 1980.

As shown in the discharge monitoring reports the company has been meeting the permit limits with the exception of pH during 1979. The company had been having problems meeting the dissolved solids concentration limit back in 1978, however, since about January 1979 SCM adopted the practice of adding Ashco makeup water to the treatment system in order to meet the dissolved solids concentration limits by dilution.

Although the SCM Corporation met all NPDES permit limits during this study, the effect of its discharge on Fields Brook was considerable as shown in Attachment #9. This table is a comparison of the upstream, downstream and plant discharge data with Ohio Water Quality Standards for a Warmwater Habitat. The SCM discharge raises the concentration of copper, dissolved solids and the temperature of Fields Brook above these standards. Both copper and temperature were just marginally above the standards, however, the downstream dissolved solids concentration was nearly twice the water quality standard.

The samples collected at Outfall 001 were analysed for volatile and non-volatile organics of significant concentrations using gas chromatography (FID) and computerized gas chromatography-mass spectrometry. Only one volatile organic priority pollutant was detected in the discharge. This compound was 1,1 Dichloroethane (2.1 µg/l). This compound is described as moderately toxic in The Condensed Chemical Dictionary¹. The field blank run as a quality control check, however, was contaminated with this compound at a 10 ppb level. Thus, the compounds presence in the SCM effluent is questionable. One non-volatile compound was also found in the effluent sample. This was 1-(2-butoxyethoxy)ethanol at a concentration of 10 µg/l. This compound is not a priority pollutant.

In addition to the organic scans done on the SCM discharge sample, the Ames Test and a bioassay were also conducted.

The Ames Test is used to indicate the presence of mutagenic/carcinogenic compounds. It involves exposing special strains of bacteria to concentrated portions of the sample in question. Changes in genetic structures in the strain of bacteria used are relatively common and occur at a predictable rate under normal conditions. These changes are detectable by differences in colony growth rate (size of colony) or other variations which develop when these bacteria are exposed to various growth media. Changes in genetic structures for this test are called revertants. When revertants occur at a rate greater than 2.5X the normal or background rate, there is an indication of the presence of mutagenic or carcinogenic compounds in the sample being tested. Toxicity is detected by the absence of bacteria, and may occur without an indication of mutagens/carcinogens. Dose response is reported as positive when a pattern of revertant counts develops with several different concentrations of the sample in question. The results of the Ames Test conducted with a SCM composited effluent sample was negative. These results are contained in Attachment 6.

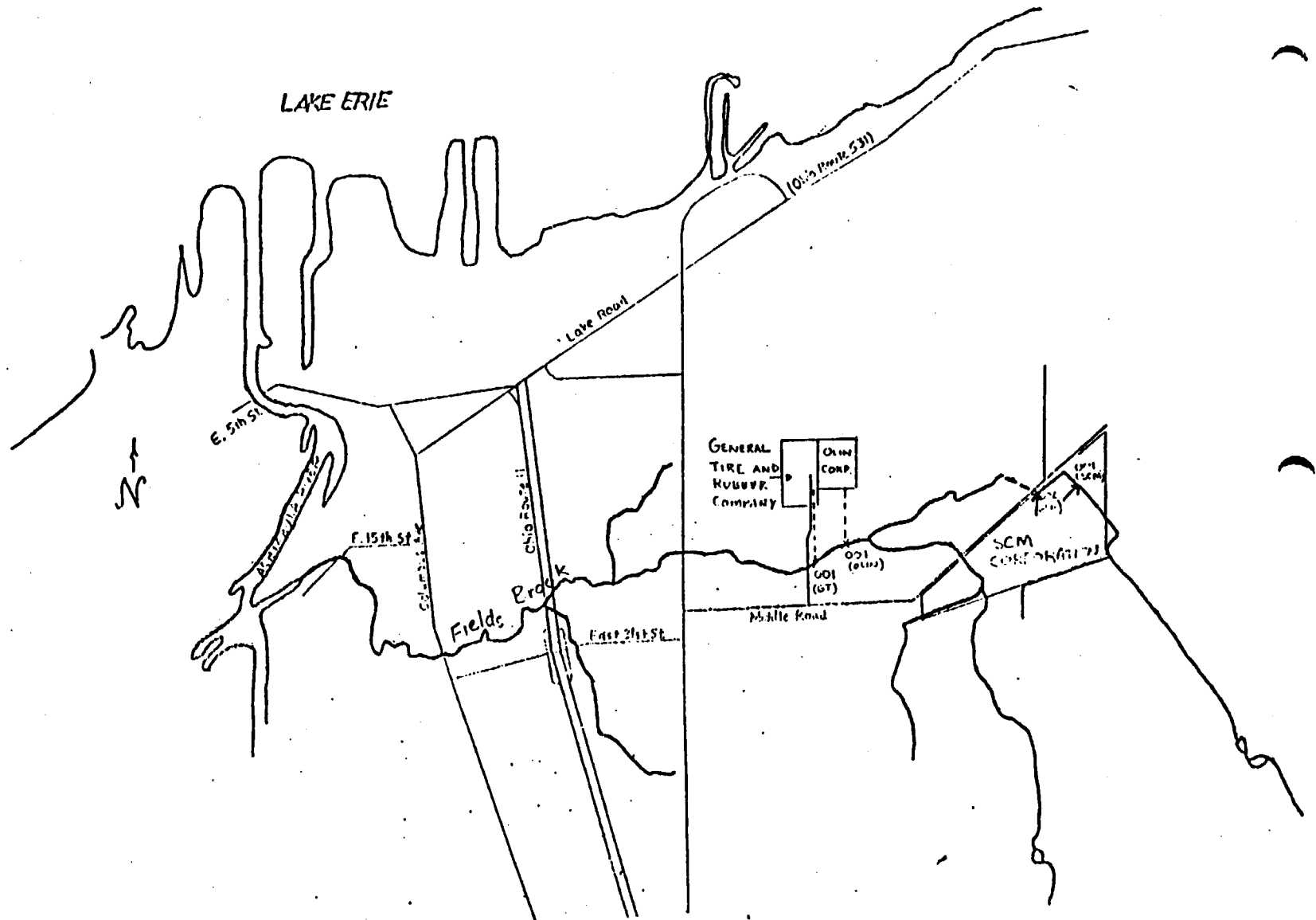
The bioassays were done using fathead minnows (*Pimephales promelas*) and daphnia magna. The tests were again done with a composited wastewater sample of the company's effluent and the results of these tests are also included in Attachment 6. The fish and daphnia bioassays were static tests using undiluted

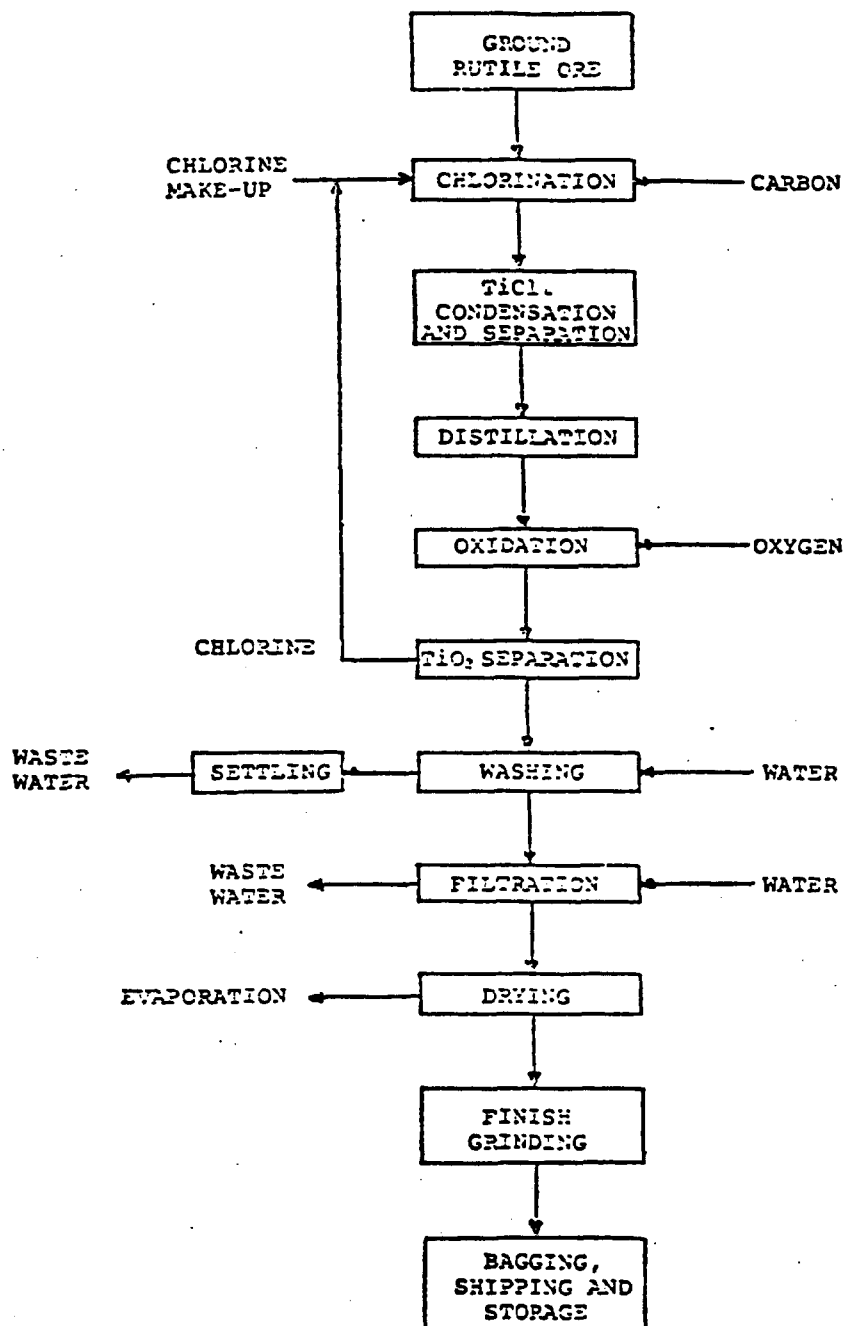
effluent samples and are reported as percent mortality with >50% being an unacceptable level. The static fish bioassay results show no toxicity to the fathead minnow. The 24 and 48 hour acute mortality to daphnia for two aliquots of the sample were 60% and 80%. A possible cause of the daphnia mortality may be the high concentration of zinc (0.152 mg/l) combined with the low hardness (calculated as 59 mg/l CaCO_3) of the SCM effluent. The 48 hour LC_{50} of zinc for *Daphnia magna* in soft water with a hardness of 45 mg/l CaCO_3 has been found to be 0.100 mg/l.²

It should be noted, however, that the zinc concentration in the SCM discharge was below the NPDES permit limits (0.36 mg/l) and the measured zinc concentration downstream of the 001 discharge was below detectable limits.

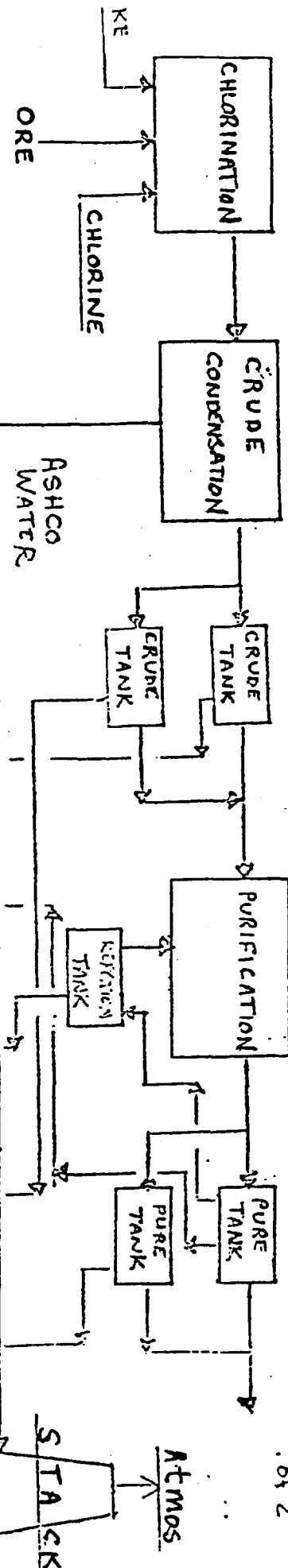
1. Hawley, G.G.: The Condensed Chemical Dictionary, 8th ed., Van Nostrand Reinhold Company, New York, NY, 1971.
2. Biesinger, K.E. and Christensen, G.M., 1972, Effects of Various Metals on Survival, Growth, Reproduction, and Metabolism of *Daphnia Magna*. Jour. Fish. Res. Bd. Canada, 29:1691.

PLANT AND DISCHARGE
LOCATIONS
SCM CORPORATION
ASHTABULA, OHIO

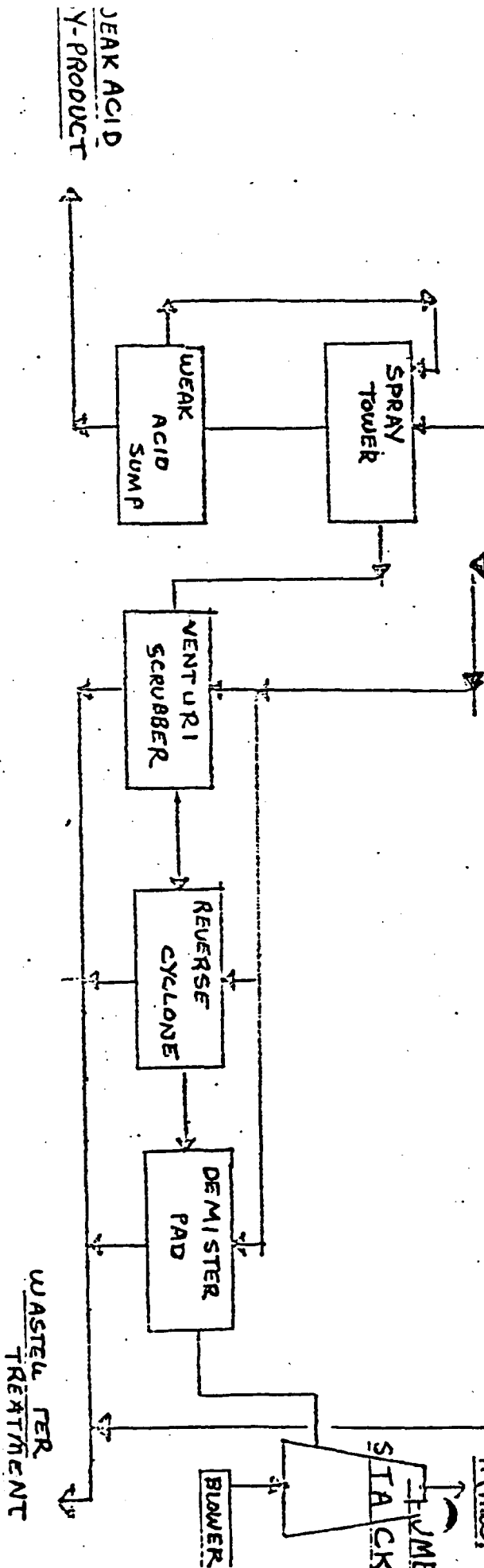




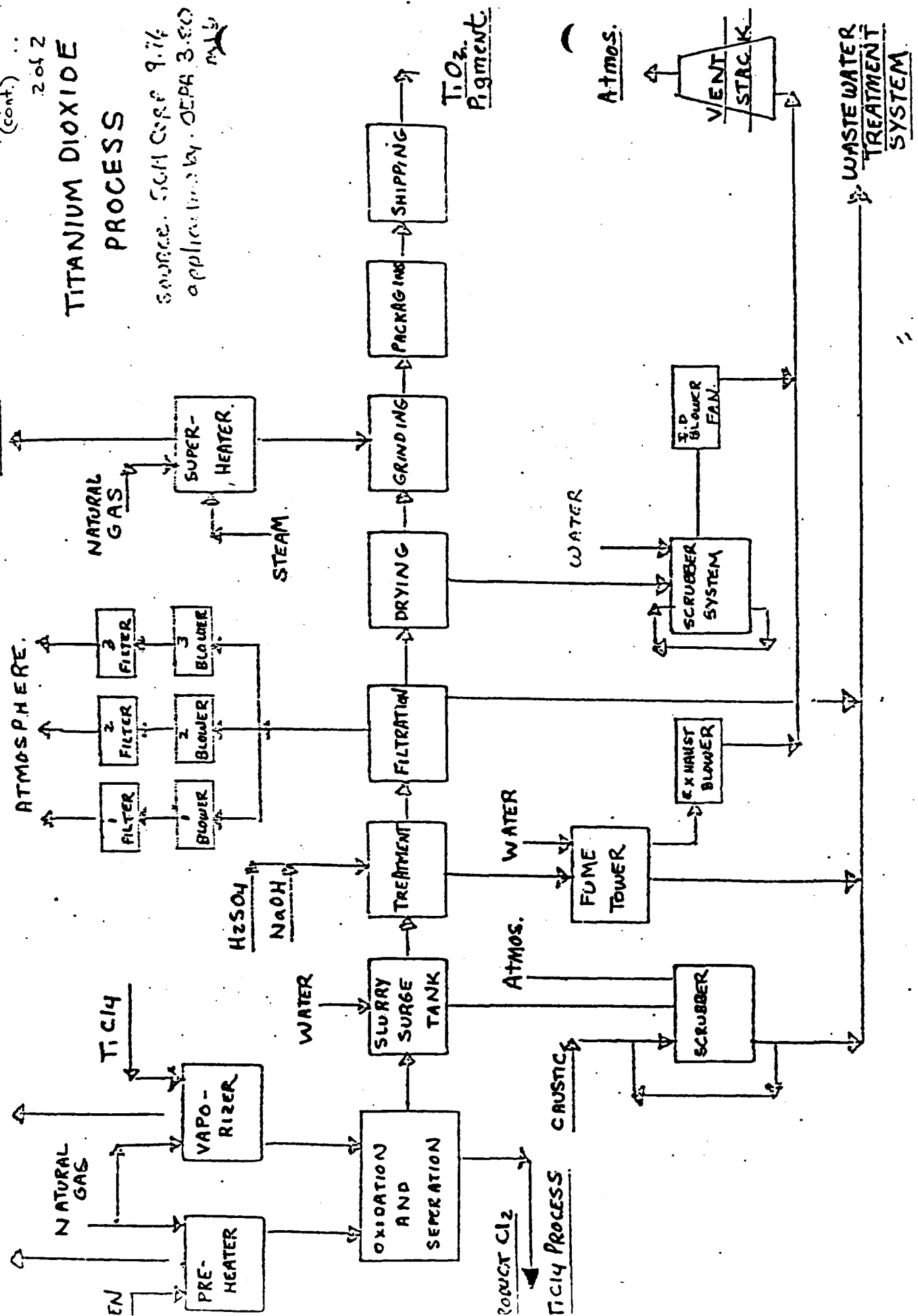
Chloride process for producing titanium dioxide



TITANIUM
tetrachloride
PROCESS
SOURCE: SCM Corp 9-76
Application by: OCPN 3-80 mth



ATMOSPHERE



ATMOSP.

ATMOSPHERE.

NATURAL GAS

SUPER-HEATER

STEAM

SHIPPING

PACKAGING

GRINDING

DRYING

FILTRATION

TREATMENT

SLURRY SURGE TANK

OXIDATION AND SEPERATION

PRODUCT Cl₂
TiCl₄ PROCESS

WATER

ATMOSP.

WATER

WATER

FUME TOWER

SCRUBBER

CAUSTIC

WASTE WATER TREATMENT SYSTEM

3-D Blower FAN

SCRUBBER SYSTEM

6 X EXHAUST BLOWER

VENT STACK

ATMOSP.

Attach. int #3
(cont.)

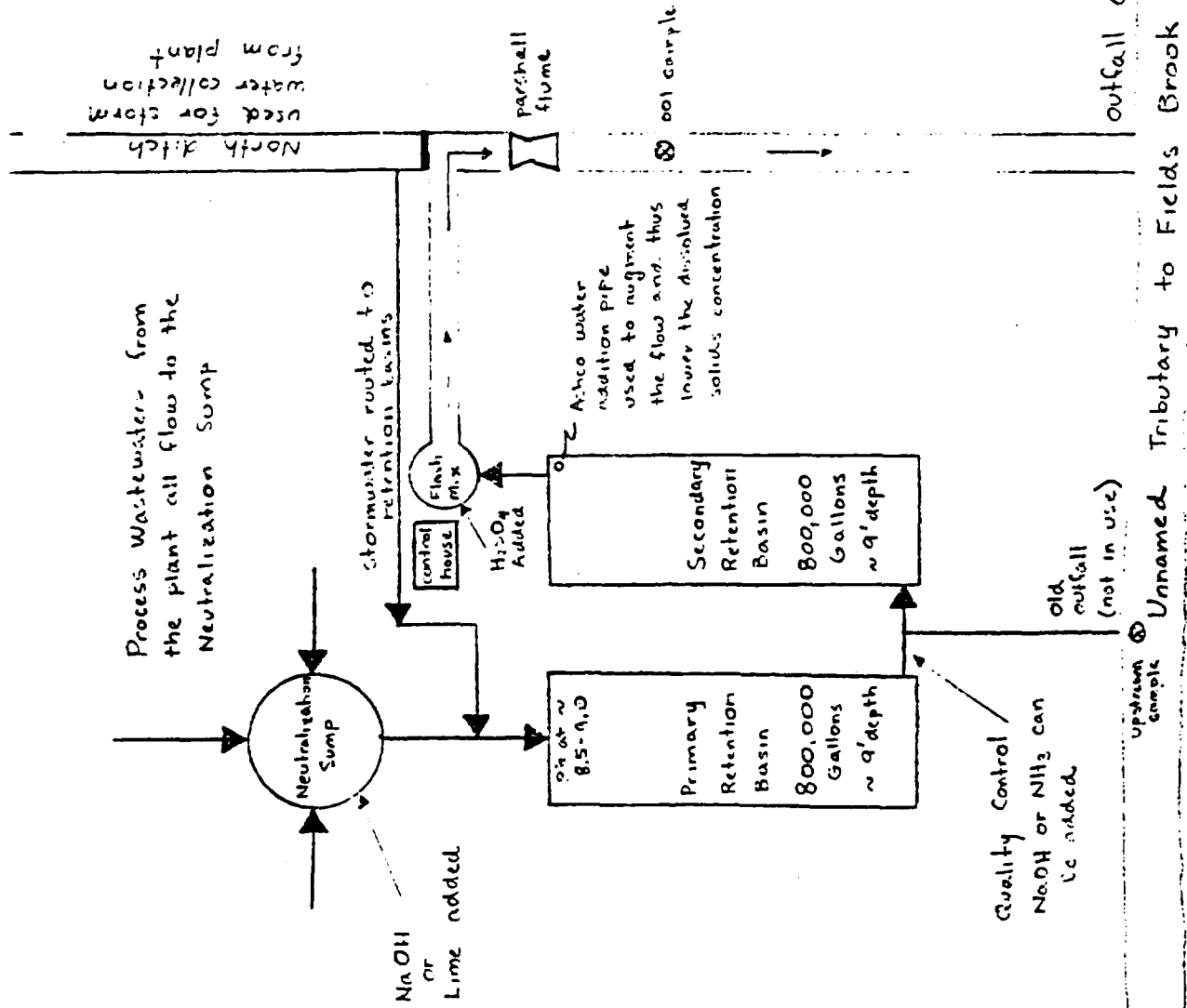
2 of 2

TITANIUM DIOXIDE PROCESS

SOURCE: SEMI CORP 9/74
APPLICATION BY: ODEPA 3/80

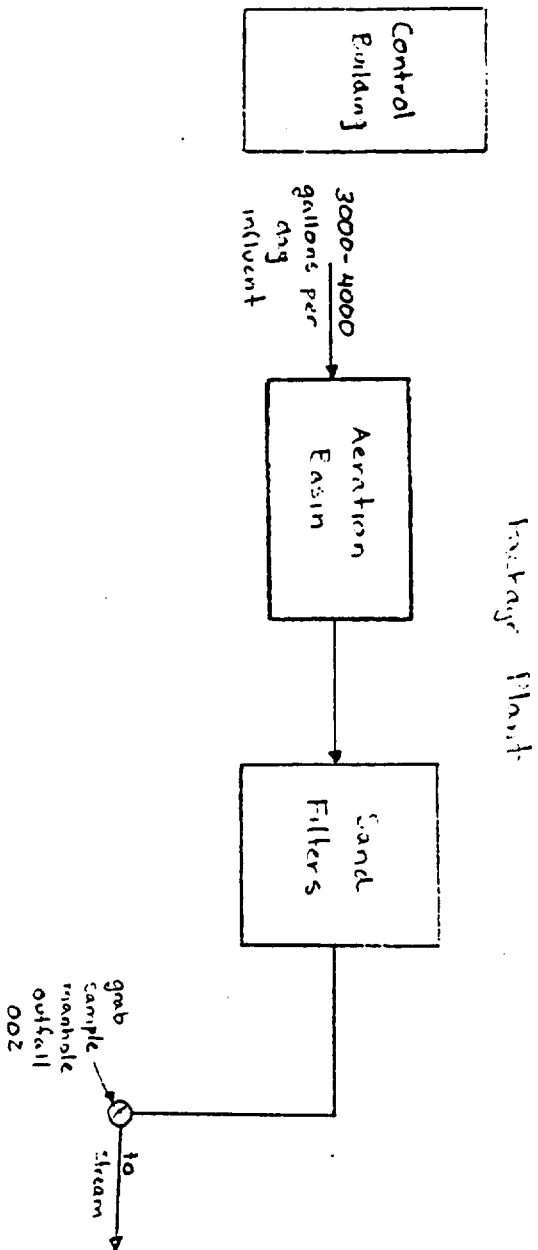
TiO₂ Pigment

WASTEWATER TREATMENT SYSTEM SCM, GLIDDEN FIGHTLIGHTS ASHTAKULA, OHIO



SEWAGE WASTEWATER TREATMENT
SYSTEM

SCM, Glidden Pigments
Asthavula, Ohio



Glidden Durker
OH 0000523)
0

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION V
Eastern District Office

Attachment 6
(1 of 5)
Sample Type: 8 C-8 hour flow proportioned impositve
24C-24 hour flow proportioned composite
EVC-Equal Volume Composite
G-Grab

	Intake Ashco Water	Outfall 001 Process Discharge	Outfall 002 STP Discharge	Upstream Fields Brook	Downstream Fields Brook
Sample Type Time	G 1/23/80 0940	24 C 1/23/80 1038-1008	G 1/23/80 1000	G 1/23/80 0900	G 1/23/80 0915
Flow (MGD)		1.070	0.004 (est)	0.4 (est)	1.407 (est)
Temperature (°C)	10.0	14.0-16.0	6.0	0.0	10.0
pH (su)		6.4-6.6	--	7.2	7.9
Residual Chlorine	--	0.0			
PARAMETER	PPM	PPM	PPM	PPM	PPM
Dissolved Oxygen (field)	12.5	8.7-8.9	7.2	12.5	9.5
Conductivity (field)	400	6000	3500	400	4000
pH (lab)	7.7	8.2	8.0	7.6	7.8
Conductivity (lab)	310	7028	3514	502	4000
Total Solids	241	4060	2114	325	2928
Dissolved Solids	174	3995	2028	300	2906
Suspended Solids	46	< 5	< 5	< 5	11
BOD ₅	2	< 4	10	1	2
Fecal Coliform	--	--	250,000	470	140
Phenol	< 0.002	< 0.002		< 0.002	< 0.002
Chloride	22	1880		67	1400
Nitrate-Nitrite-N			1.73	0.83	0.53
Ammonia-N			8.37	0.42	0.16
Total Phosphorus			1.25	0.10	0.04
COD	31	28	51	26	28
Total Mercury		0.0003		0.0008	0.0002
Calcium	34.5	18.1		36.4	23.7
Magnesium	8.1	3.4		9.3	4.7
Sodium	15.1	1040.0		45.3	796.0
Silver	< 0.003	< 0.003		< 0.003	< 0.003
Aluminum	1.460	0.214		0.339	0.159
Boron	< 0.080	0.252		0.088	0.223
Barium	0.028	< 0.005		0.030	0.008
Beryllium	< 0.001	< 0.001		< 0.001	< 0.001
Cadmium	< 0.002	< 0.002		< 0.002	< 0.002
Cobalt	< 0.005	< 0.005			

Discharger: SCM Corporation - Glidden Durkee
Ashtabula, Ohio (OH 0000523)
Sample Date: January 22-23, 1980

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION V
Eastern District Office

Attachment 6
(2 of 5)

Sample Type: 8 C-8 hour flow proportioned composite
24C-24 hour flow proportioned composite
EVC-Equal Volume Composite
G-Grab

[illegible]

Volatile Organic Analysis of Effluent (Outfall 001)
from SCM Corporation, Ash Grove - January 22-23, 1980
(1 grab sample)

Attachment 6
(3 of 5)

Date: 1/23/80
Time: 0837

<u>Compounds Detected</u>	Sample Number and Concentration (ppb)	
	VOA #1 EDO471 80-EM02S06	Reagent Blank EDO471 80-EM02R08
1,1-Dichloroethane	2.1	10
1,2-Dichloroethylene	<1.1	<1.1
Chloroform	<1.5	<1.5
1,2-Dichloroethane	<1.1	<1.1
1,1,1-Trichloroethane	<1.7	<1.7
Carbon Tetrachloride	<1.8	<1.8
Bromodichloromethane	<3.8	<3.8
1-Bromo-2-Chloroethane	<4.6	<4.6
1,2-Dichloropropane	<0.7	<0.7
Trans-1,3-Dichloropropene	<0.7	3.2
Benzene	<0.5	<0.5
Trichloroethylene	<6.0	<6.0
Chlorodibromomethane	<1.5	<1.5
1,1,2-Trichloroethane	<1.5	<1.5
Cis-1,3-Dichloropropene	<1.5	<1.5
Bromoform	<1.4	<1.4
1,1,2,2-Tetrachloroethane	<1.0	<1.0
Tetrachloroethylene	<0.5	7.0
Toluene	<0.5	<0.5
Chlorobenzene	<0.5	<0.5
1-methoxy-1-propene*	<0.5	<0.5
1,1 Oxybisethane*	<0.5	<0.5
1,1,2-Trichloro -	<0.5	<0.5
1,2,2-Trifluoroethane*		

Concentrations of all compounds denoted () were estimated versus the response of the other compounds.

Non-Volatile Organic Analysis of Effluent (Outfall 001)
 from SCM Corporation, Ashtabula - January 22-23, 1980
 (One 24-hour composite sample)

Date: 1/22-23/80

Collection Time Period: 1038-1008

Sample Number and
 Concentration (ppb)

EDO471
 80-EM02S01

Compounds Detected

1,2-Dichlorobenzene	<0.6
1,4-Dichlorobenzene	<0.6
Trichlorobenzene	<0.8
Naphthalene	<0.3
Diethyl Phthalate	<0.4
Fluoranthene	<0.7
Pyrene	<0.7
Bis(2-ethylhexyl)phthalate	<2.0
Isophorone	<6.4
Phenanthrene	<0.7
Anthracene	<0.7
1-(2-Butoxyethoxy)ethanol*	10
Tetrachlorobenzene	<2.8
Dimethyl Naphthalene*	<2.1
Phenol*	<3.0
Benzonitrile*	<3.0
1-Methyl-4-Ethenyl Benzene*	<2.1
Phenyl Ethanone*	<2.1
Methyl Phenol*	<2.1
Dimethyl Phenol*	<2.1
1,1-2-ethyl biphenyl*	<3.0
Unknown Silyl Compounds*	<3.0
Di-n-Butyl Phthalate*	<3.0
Total Aliphatic Hydrocarbons*	<3.0
Other Unidentified Compounds	<3.0

Concentrations of all compounds denoted (*) were estimated versus the response of

Ames and Bioassay Results
SCM Corporation Effluent

Ames Test Results

	<u>Date Sampled</u>	<u>CRL Data Set No.</u>	<u>Sample Number</u>	<u>Concentration</u>	<u>Revertant Counts X Background Counts</u>	<u>Toxicity</u>	<u>Dose Response</u>
SCM - Glidden Durkee Ashtabula, Ohio	1/22-23/80	471	80EM02S01	100X	1	None	None

Bioassay Test Results

	<u>Date Sampled</u>	<u>CRL Data Set No.</u>	<u>Sample Number</u>	<u>Aliquot</u>	<u>Fish % Mortality</u>			<u>Daphnia % Mortality</u>	
					<u>24 hrs</u>	<u>48 hrs</u>	<u>96 hrs</u>	<u>24 hrs</u>	<u>48 hrs</u>
SCM Glidden Durkee Ashtabula, Ohio	1/22-23/80	471	80EM02S01	1	0	0	0	80	80
		471	80EM02S01	2	0	0	0	60	60
		471	80EM02S01	3	0	0	0	--	--
		471	80EM02S01	4	0	0	0	--	--
		Control	--	1	0	0	0	0	0
		Control	--	2	0	0	0	0	0

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
10-20-80	Gulf & Western	Unknown/Particulates	State and Middle Road	Y
10-24-80	Bill Krause	Unknown/Brine	Rock Creek	N
10-24-80	Old Dump	Unknown/Unknown	Ashtabula	Unknown
10-30-80	National Petroleum Corp.	Unknown/Brine	Lenox Twp.	N
11-05-80	Olin Corp.	Unknown/Mono Chlorobenzene Unknown/Toluene Diamine	Middle Road	Y
11-05-80	National Petroleum Corp.	525 Gallons/Crude Oil	Lenox Twp.	N
11-15-80	RMI Inc.	Unknown/White Power	State Road	Y
11-21-80	Gulf & Western	Unknown/Sulfur Chloride	Corner of State and Middle Road	Y
11-24-80	Unknown	Unknown/Unknown	Geneva	N
11-27-80	Richardson Co.	50 Gallons/Oil (10 Gallons Recovered)	Conneaut Creek	N
✓ 12-02-80	Acme Scrap Iron & Metal Co.	50 Gallons/Oil, Water Sediment; Possible PCB contamination (5 Gallons Recovered)	Fields Brook	Y
12-07-80	Conrail Corp.	1000 Gallons/Fuel Oil	Ashtabula River	Y
12-06-80	Lawn and Garden Center	Unknown/Pesticides	Ashtabula	Unknown
2-13-80	Unknown	Unknown/Brine or Waste	Rock Creek	N



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

04 0980614572

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA 02 ☒ OBSERVED (DATE 1981) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION ^{AREA}
VEGETATION NEAR AND ON DETREX SITE.

01 ☒ K. DAMAGE TO FAUNA 02 ☒ OBSERVED (DATE 1981) ☒ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION (INCLUDE NAME(S) OF SPECIES)
SHAD FISH IN CREEK CONTAMINATED WITH CHLORINATED ORGANIC
MATERIALS, (STATE) INSPECTION.

01 ☒ L. CONTAMINATION OF FOOD CHAIN 02 ☐ OBSERVED (DATE) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
FISH FROM CREEK AND RIVER

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES 02 ☐ OBSERVED (DATE 1981) ☒ POTENTIAL ☒ ALLEGED
(Sinks/runoff standing liquids leaking drums)
03 POPULATION POTENTIALLY AFFECTED 5200 04 NARRATIVE DESCRIPTION
LEACHATE FROM DETREX LANDFILL CONTAMINATING CREEK. SAME POTEN-
TIAL EXISTS FROM OTHER COMPANIES.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY 02 ☒ OBSERVED (DATE 1981) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
CONTAMINATION OF PROPERTY DOWN STREAM OF DISCHARGES. ALL
OWNERS UNDER RIPARIAN RIGHTS.

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 ☒ OBSERVED (DATE 1980) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
ACME SCRAP IS DISCHARGING PCB CONTAMINATED OIL TO STORM DRAIN.
STATE IS MONITORING COMPANY.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING 02 ☒ OBSERVED (DATE 1979) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
STATE CONTENDS DISPOSAL AND LEACHATE TO CREEK WAS UNAUTHORIZED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 21000

IV. COMMENTS

NONE

V. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports).

SITE INSPECTION AND OEPA REPORTS. REMFIS FILES

~~Office~~ Inter-Office Communication

TO: Dennis Lee, IWW, NEDO DATE: June 15, 1981
FROM: Mark Baumgardner, IWW, NEDO
SUBJECT: Acme Scrap Ashtabula/Ashtabula - State & Middle Rds., Fields Brook

During the CSI of G+W Natural Resources on June 3, 9, 10, 1981, the writer had the opportunity to view the storm sewer containing the discharge from the above captioned entity. As you know, the storm sewer enters Fields Brook immediately downstream of G+W's station E 317*901 at the southeast corner of the State Road bridge.

A boom had been installed to control oil discharges from the storm sewer; however on all three dates, it appeared as though the boom was not being maintained properly. This allowed light oils to escape and caused a sheen on the brook. Heavy oils also escaped the boom as the water level or wind direction changed. At times, some amounts of oil coated TSS also originated from the sewer and bypassed the boom completely.

If the entity plans to install a treatment system and must treat light oils, heavy oils, and oil coated TSS, additional equipment other than a conventional API separator may be needed. In the interim, the boom on the brook should be checked daily and maintained as needed.

NTB:mjc

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: March 1, 1982

SUBJECT: PCB Inspection at Acme Scrap Iron and Metal in Ashtabula, Ohio

FROM: Daniel C. Watson, Physical Scientist
THRU: A.R. Winkhofer, Director, EDO

TO: Karl Bremer, Toxic Substances Coordinator, SAH

*Inspection
May 21, 1981*

#1

May 21, 1981

At the request of Melinda Becker (OEPA-NEDO) the writer conducted a PCB inspection at Acme Scrap Iron and Metal at 2101 State Road in Ashtabula on May 21, 1981. Ohio on May 21, 1981. Ms. Becker's request was prompted by several reports from Ashtabula residents about the subject company burning PCB transformers. The company reportedly burns the transformers in order to recover copper, aluminum, and steel for sale as scrap metal.

At the facility the writer and Ms. Becker talked to Sam Simon, President of Acme Scrap. Mr. Simon stated that he does not now handle nor has he ever handled PCBs. After this interview the writer, along with Mr. Simon, Ms. Becker, and Dennis Lee (OEPA), toured the facility and the following samples were collected:

5/21/81



<u>Sample Number</u>	<u>Type</u>	<u>Location (see attached map)</u>
81EW10S01	Soil	Transformer Burn Area
81EW10S02	Soil	Oil Storage Area
81EW10S03	Water and Oil	Sewer Discharge
81EW10S04	Sediment and Oil	Sediment Below Discharge

Sample 81EW10S01 consisted of soil collected in the area where transformers are reportedly burned. There were pieces of burned transformers in this area and the ground was charred. Sample 81EW10S02 consisted of oil soaked soil collected in an oil storage area. The oil in this area is stored in 55 gallon drums and housekeeping is poor. Samples 81EW10S03 and 81EW10S04 were collected at the point where the facility's storm sewer system discharges into Fields Brook. There is an absorbent boom around this area to keep the massive amount of oil being discharged from this pipe from entering the waterway. The water sample collected from this area contained about 1/4 to 1/2 congealed oil.

Laboratory analysis results from these samples were received at EDO on January 29, 1982, and showed the following:

81EW10S01 - 114 ppm PCB Aroclor 1254 (*where transformers are burned*)
81EW10S02 - < 5 ppm PCB
81EW10S03 - 189 ppm PCB Aroclor 1254 in the oil layer
81EW10S04 - < 5 ppm PCB

These results indicate that there have been PCB items in the burn area. Also, PCB oil is being handled at this facility and is discharged to Fields Brook via the facility's storm sewer system. This facility has no NPDES permit. Inspectors from the Ohio EPA have

collected samples of this discharge on a bimonthly basis and according to Mark Torf (OEPA) have found concentrations ranging from 100-500 ppm.

Three large utility transformers were at the facility during this inspection. Mr. Simon of Acme Scrap stated that they came from the Cleveland Electric Illuminating Company's Miles Service Center and are waiting to be scrapped. Mr. Simon stated that he had no documentation showing that these are not PCB transformers but "he knows that CEI would not send him PCB transformers". The writer copied the make and serial numbers off the transformer name plates. This information was given to Dan Rice of CEI on May 22, 1981 and Mr. Rice said he would see if the company had PCB test results for these transformers. Mr. Rice has not as yet done this.

An intensive survey of Acme Scrap has been scheduled for the week of March 29, 1982 to determine the source of the facility's continuous PCB discharge to Fields Brook and the extent of the facility's PCB contamination. Oil samples will also be collected at all storage areas and from any transformers on the property.

cc: Ed DiDominico, 5WQ-13

June 11, 1981

Open Burning Observed at Acme Salvage in Ashtabula, Ohio (no request number)

Daniel C. Watson
THRU: A. R. Winkhofer, Director, EDO

Stephanie Valentine
Engineering Section, SEAE

While on a June 2, 1981 water survey in Ashtabula, Charles Baier and Joseph Good of EDO noticed open burning at Acme Salvage and Scrap at State and Middle Roads. They noticed the burning from 1405 through 1420 EDST. The smoke was a very dense black and had a strong odor of burning rubber or insulation. Photographs were taken from Middle Road at a railroad crossing and will be sent at a later date.

The writer visited the site on May 21, 1981 on a complaint that the company was burning power transformers possibly containing PCB. During this visit a sight was found where transformers had been burned and PCB samples were collected. There were three unburned transformers at the facility during this visit.

Attachment

✓ cc: Chris Frazier, OEPA - NEDO

RECEIVED

JUN 15 1981

OHIO ENVIRONMENTAL
PROTECTION AGENCY
N. E. D. O.

~~On~~ EPA Inter-Office Communication

TO: Dennis Lee, Industrial Wastewater

DATE: June 25, 1981

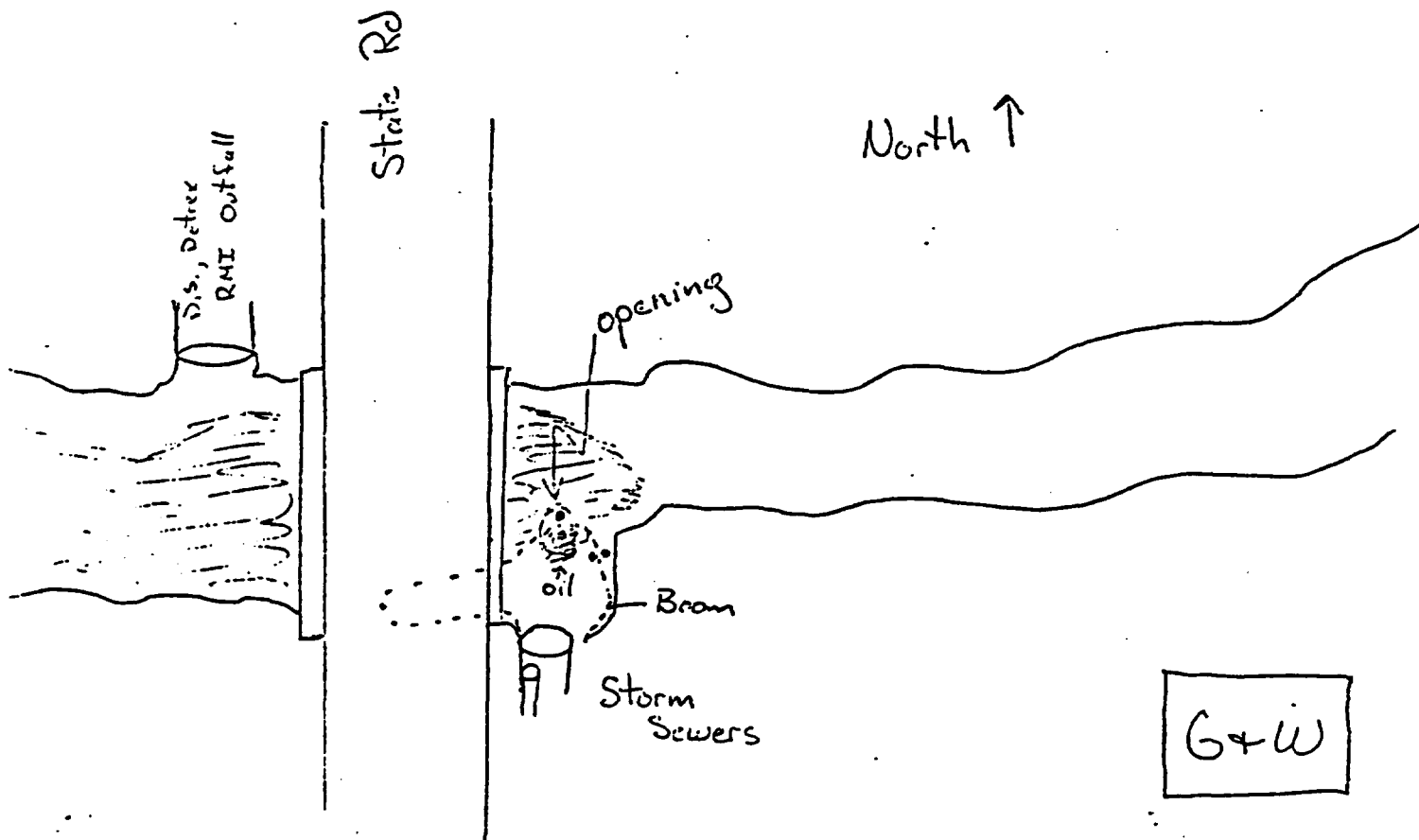
FROM: Steve Tuckerman, Surveillance *ST*

SUBJECT: Acme Scrap Oil Boom

The oil boom in Fields Brook at State Road was not working properly on June 23, 1981, and was allowing oil to escape to Fields Brook. This oil covered 95% of the surface area of the brook at State Road and was observed at State Route 11 and 15th Street. The boom was laying on top of two pipes that are used for securing the boom and the bottom of the boom was three inches above the water's surface. There was very little oil behind the boom and most of that was concentrated near the opening. Eddy currents were carrying the oil through the opening and out to the brook. I repositioned the boom and it was working properly when I left at 11:30 a.m.

ST:cil

cc: Jim Irwin, Emergency Response



~~CHIEF~~ Inter-Office Communication

TO: Dennis Lee IWW NEDO DATE: 7-22-81
FROM: Steve Tuckerman SurV. NEDO
SUBJECT: Acme Scrap.

The Acme Scrap Oil Boom in Fields Brook was not working properly on 7-21-81 @ 11:00 A.M. Oil was escaping from the boom & creating an oil slick on Fields Brook. There was approximately 20 gallons of oil behind the boom. ~~So~~ Absorbent pads had been placed in the oil behind the boom. Several pictures were taken.

~~CHIEF~~ Inter-Office Communication

TO: Dennis Lee IWW NEDO DATE: 7-28-81
FROM: Steve Tuckerman WW Surveillance NEDO
SUBJECT: Acme Scrap.

On 7-28-81 @ 10:30 the boom placed by Acme scrap in Fields Brook was once again failing. Several absorbant pads that had been confined inside the boom on an earlier inspection, ~~were~~ now laying along the bank of the brook outside of the boom.

~~Ohio EPA~~ Inter-Office Communication

TO: Acme Scrap File/Ashtabula thru Dennis Lee DATE: August 21, 1981
FROM: Mark Baumgardner *MTB*
SUBJECT: Field's Brook Discharge

On August 13, 1981, it was noted that the Acme Scrap discharge to Field's Brook via the SE Storm Sewer at State Road did not look very good. Light oil was escaping the boom and causing a sheen on the Brook. Solids coated with oil and old oil caught behind the boom needed to be removed as significant amounts had been collected.

If the Brook level rises after a storm, there is the potential for significant amounts of this oil to escape the boom and cause a slick downstream.

MTB:mjo

~~Chief~~ Inter-Office Communication

TO: Dennis Lee, Industrial Wastewater DATE: August 20, 1981
FROM: Harry Courtwright, Surveillance HC (u)
SUBJECT: Acme Scrap Oil Boom on Fields Brook

An oil sheen was observed on Fields Brook by Steve Tuckerman and myself immediately downstream of a full Acme Scrap oil boom on Tuesday, August 18, 1981. On Wednesday, August 19, 1981, the site was revisited by Steve Tuckerman, Dave Stroud, and myself. Two employees of Acme Scrap were discovered drawing oil from behind the boom into buckets and transferred the oil into 55-gallon drums. When Tuckerman inquired about the destination of the drums, one of the Acme Scrap employees stated that the oil in the past had been poured out beside the warehouse and set afire.

HC:c11

cc: Chris Frazier, OAPC
Steve Tuckerman, Surveillance

~~Chicopee~~ Inter-Office Communication

TO: Dennis Lee IWW DATE: 10-21-81

FROM: Steve Tucker CITHM

SUBJECT: Acme Scrap

F, Y, I. Dave Wirtz & I stopped along
Fields Brook ^{(10-20-81) 12:00} to check out the boom placed by
Acme Scrap. Workers were skimming the oil from
inside the boom at that time. I asked them
how often they've done this & they said about
once a month. Also Koski had started construction
along their eastern facility.



8202073

Ohio Department of Health

Industrial Chemistry Section

Environmental Sample Submission Report

Agency: OEPHDivision Program: HM 52Analysis Reported To: ☒ CO ☐ CDO ☐ SE
☐ NE ☐ SW ☐ NWLaboratory: ☐ Central ☐ SE ☐ NE ☐ SW ☐ NWSample Number: HM-114Analyst: J. Evans Supervisor: J. H. JonesDate Received: 2-16-82Date Reported: 2-26-82

Sample Identification

Station: Fieles Brook @ State RdID Number: SCAddress: it was Scrap out fromCity: Ashtabula Zip: County: Ashtabula Phone: Collected By: Tuckerman

Grab Sample Date or Beginning Date of Composite Sample—Use Military Time

Year Month Day Hour Minute

8/20/82 09/11/15

Ending Date of Composite Sample—Use Military Time

Year Month Day Hour Minute

CVT S/T TYP

Field Treatment:

- ☐ Filtered ☐ CuSO₄ + H₃PO₄
☒ Iced ☐ H₂SO₄
☐ NaOH ☐ HNO₃
☐ Other (Explain)

Additional Information—Analyst Remarks—Non Routine Analytical Requests

PCB's in oil only

Possibility of another type of PCB occurring with the 1254. There appears to be a difference at the 1254.

Radioisotopes

<input type="checkbox"/> Alpha, Total pc/l	P1501.
<input type="checkbox"/> Alpha, Diss pc/l	P1503.
<input type="checkbox"/> Alpha, Suspd pc/l	P1505.
<input type="checkbox"/> Beta, Total pc/l	P3501.
<input type="checkbox"/> Beta, Diss pc/l	P3503.
<input type="checkbox"/> Beta, Suspd pc/l	P3505.
<input type="checkbox"/> Barium-140, Total pc/l	P75030.
<input type="checkbox"/> Cesium-134, Total pc/l	P28414.
<input type="checkbox"/> Cesium-137, Total pc/l	P28401.
<input type="checkbox"/> Iodine-131, Total pc/l	P28301.
<input type="checkbox"/> Potassium-40, Total pc/l	P75038.
<input type="checkbox"/> Radium-226, Total pc/l	P9501.
<input type="checkbox"/> Radium-228, Total pc/l	P11501.
<input type="checkbox"/> Strontium-90, Total pc/l	P13501.
<input type="checkbox"/> Strontium-89, Total pc/l	P15501.
<input type="checkbox"/> Tritium pc/l	P7000.

Pesticides

<input type="checkbox"/> Aldrin, Whl Sampl ug/l	P39330.
<input type="checkbox"/> DDD, Whl Sampl ug/l	P39380.
<input type="checkbox"/> DDE, Whl Sampl ug/l	P39385.
<input type="checkbox"/> DDT, Whl Sample ug/l	P39370.
<input type="checkbox"/> Dieldrin, Whl Sampl ug/l	P39380.
<input type="checkbox"/> Chlordane, Whl Sampl ug/l	P39350.
<input type="checkbox"/> Endrin, Whl Sampl ug/l	P39390.
<input type="checkbox"/> Heptachlor, Whl Sampl ug/l	P39410.
<input type="checkbox"/> Hchlr-Epoide, Whl Sampl ug/l	P39420.
<input type="checkbox"/> Lindane, Whl Sampl ug/l	P39782.
<input type="checkbox"/> Methoxychlor, Whl Sampl ug/l	P39480.
<input type="checkbox"/> Malathion, Whl Sampl ug/l	P39530.
<input type="checkbox"/> Parathion, Whl Sampl ug/l	P39540.
<input type="checkbox"/> Methyl Parathn, Whl Sampl ug/l	P39800.
<input type="checkbox"/> Toxaphene, Whl Sampl ug/l	P39400.
<input type="checkbox"/> 2, 4-D, Whl Sampl ug/l	P39730.
<input type="checkbox"/> Silvex, Whl Sampl ug/l	P39780.
<input type="checkbox"/> BHC, Whl Sampl ug/l	P39340.
<input type="checkbox"/> Mirex, Whl Sampl ug/l	P39755.
<input type="checkbox"/> Diazinon, Whl Sampl ug/l	P39570.

Volatile Organics

<input type="checkbox"/> Chloroform, Total ug/l	P32106.
<input type="checkbox"/> Methylene Chloride, Total ug/l	P34423.
<input type="checkbox"/> Carbon Tetrachloride, Total ug/l	P32102.
<input type="checkbox"/> Bromoform, Total ug/l	P32104.
<input type="checkbox"/> Bromodichloromethane, Total ug/l	P32101.
<input type="checkbox"/> Dibromochloromethane, Total ug/l	P32105.
<input type="checkbox"/> 1, 2-Dichloroethane, Total ug/l	P32103.
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Special Parameters

<input checked="" type="checkbox"/> PCB, Whl Sampl ug/l: <u>-0.1 PCB's</u>	P39516. <u>35%</u>
<input type="checkbox"/> Chlorophyll "A" ug/l	P32209.
<input type="checkbox"/> Phenols ug/l	P32730.
<input type="checkbox"/> Sample Purpose	P71999.
<input type="checkbox"/> Sample Code	P115.
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Distribution: 1—Data Processing 2—Central Office 3—District Office 4—Owner 5—Laboratory

Ohio Department of Health

Industrial Chemistry Section

Environmental Sample Submission Report

Agency: Ohio EPA
 Division Program: Emergency Response
 Analysis Reported To: ☒ CO ☐ CDO ☐ SE
☐ NE ☐ SW ☐ NW

Laboratory: ☐ Central ☐ SE ☐ NE ☐ SW ☐ NW
 Sample Number: P-8926
 Analyst: J. Evans Supervisor: J. Huer
 Date Received: 10-22-81
 Date Reported: 11-4-81

Station: Spill # 124-2445 1980 Sample Identification

Station: Transfraser #691
 ID Number: SC, ACHE, Susp Dren & Metal
 Address: 2101 State Rd
 City: Ashtabula Zip:
 County: Ashtabula Phone:
 Collected By: Mark TOS 444-6542

Grab Sample Date or Beginning Date of Composite Sample—Use Military Time

Year	Month	Day	Hour	Minute
81	10	20	15	25

Ending Date of Composite Sample—Use Military Time

Year	Month	Day	Hour	Minute	CVT	S/T	TYP

Field Treatment:

Additional Information—Analyst Remarks—Non Routine Analytical Requests

☐ Filtered ☐ CuSO₄ - H₃PO₄ transfraser oil
☐ Iced ☐ H₂SO₄
☐ NaOH ☐ HNO₃
☐ Other (Explain)

Radioisotopes

<input type="checkbox"/> Alpha, Total pc/l	P1501
<input type="checkbox"/> Alpha, Diss pc/l	P1503
<input type="checkbox"/> Alpha, Susp pc/l	P1505
<input type="checkbox"/> Beta, Total pc/l	P3501
<input type="checkbox"/> Beta, Diss pc/l	P3503
<input type="checkbox"/> Beta, Susp pc/l	P3505
<input type="checkbox"/> Barium-140, Total pc/l	P75030
<input type="checkbox"/> Cesium-134, Total pc/l	P28414
<input type="checkbox"/> Cesium-137, Total pc/l	P28401
<input type="checkbox"/> Iodine-131, Total pc/l	P28301
<input type="checkbox"/> Potassium-40, Total pc/l	P75038
<input type="checkbox"/> Radium-226, Total pc/l	P9501
<input type="checkbox"/> Radium-228, Total pc/l	P11501
<input type="checkbox"/> Strontium-90, Total pc/l	P13501
<input type="checkbox"/> Strontium-89, Total pc/l	P15501
<input type="checkbox"/> Tritium pc/l	P7000

Volatile Organics

<input type="checkbox"/> Chloroform, Total ug/l	P32106
<input type="checkbox"/> Methylene Chloride, Total ug/l	P34423
<input type="checkbox"/> Carbon Tetrachloride, Total ug/l	P32102
<input type="checkbox"/> Bromoform, Total ug/l	P32104
<input type="checkbox"/> Bromodichloromethane, Total ug/l	P32101
<input type="checkbox"/> Dibromochloromethane, Total ug/l	P32105
<input type="checkbox"/> 1, 2-Dichloroethane, Total ug/l	P32103
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Pesticides

<input type="checkbox"/> Aldrin, Whl Sampl ug/l	P39330
<input type="checkbox"/> DDD, Whl Sampl ug/l	P39360
<input type="checkbox"/> DDE, Whl Sampl ug/l	P39365
<input type="checkbox"/> DDT, Whl Sample ug/l	P39370
<input type="checkbox"/> Dieldrin, Whl Sampl ug/l	P39380
<input type="checkbox"/> Chlordane, Whl Sampl ug/l	P39350
<input type="checkbox"/> Endrin, Whl Sampl ug/l	P39390
<input type="checkbox"/> Heptachlor, Whl Sampl ug/l	P39410
<input type="checkbox"/> Hchl-Epoxyde, Whl Sampl ug/l	P39420
<input type="checkbox"/> Lindane, Whl Sampl ug/l	P39782
<input type="checkbox"/> Methoxychlor, Whl Sampl ug/l	P39480
<input type="checkbox"/> Malathion, Whl Sampl ug/l	P39530
<input type="checkbox"/> Parathion, Whl Sampl ug/l	P39540
<input type="checkbox"/> Methyl Parathn, Whl Sampl ug/l	P39600
<input type="checkbox"/> Toxaphene, Whl Sampl ug/l	P39400
<input type="checkbox"/> 2, 4-D, Whl Sampl ug/l	P39730
<input type="checkbox"/> Silvex, Whl Sampl ug/l	P39760
<input type="checkbox"/> BHC, Whl Sampl ug/l	P39340
<input type="checkbox"/> Mirex, Whl Sampl ug/l	P39755
<input type="checkbox"/> Diazinon, Whl Sampl ug/l	P39570

Special Parameters

<input checked="" type="checkbox"/> PCB, Whl Sampl ug/gm.	P39516, <5
<input type="checkbox"/> Chlorophyll "A" ug/l	P32209
<input type="checkbox"/> Phenols ug/l	P32730
<input type="checkbox"/> Sample Purpose	P71999
<input type="checkbox"/> Sample Code	P115
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Distribution: 1—Data Processing 2—Central Office 3—District Office 4—Owner 5—Laboratory

Ohio Department of Health

Industrial Chemistry Section

Environmental Sample Submission Report

Agency: Ohio EPA
 Division Program: Emergency Response 1-1-77
 Analysis Reported To: ECO ☐ CDO ☐ SE
☐ NE ☐ SW ☐ NW

Laboratory: ☒ Central ☐ SE ☐ NE ☐ SW ☐ NW
 Sample Number: 1-8534
 Analyst: J. Jolly Supervisor: J. Green
 Date Received: 6-8-81
 Date Reported: 9-23-81

Sample Identification

Station: Storm sewer from Acme Garage
 ID Number: SC
 Address: Ashtabula
 City: Ashtabula Zip:
 County: Ashtabula Phone:
 Collected By: Jim IRwin

Grab Sample Date or Beginning Date of Composite Sample—Use Military Time

Year	Month	Day	Hour	Minute
81	06	21	18	00

Ending Date of Composite Sample—Use Military Time

Year	Month	Day	Hour	Minute	CVT	S/T	TYP

Field Treatment:

- ☐ Filtered ☐ CuSO₄ - H₃PO₄
☐ Iced ☐ H₂SO₄
☐ NaOH ☐ HNO₃
☐ Other (Explain)

Additional Information—Analyst Remarks—Non Routine Analytical Requests

PCB only - spill into Trunk / Fire Hydrant

Radioisotopes

<input type="checkbox"/> Alpha, Total pCi	P1501
<input type="checkbox"/> Alpha, Diss pCi	P1503
<input type="checkbox"/> Alpha, Susp pCi	P1505
<input type="checkbox"/> Beta, Total pCi	P3501
<input type="checkbox"/> Beta, Diss pCi	P3503
<input type="checkbox"/> Beta, Susp pCi	P3505
<input type="checkbox"/> Barium-140, Total pCi	P75030
<input type="checkbox"/> Cesium-134, Total pCi	P28414
<input type="checkbox"/> Cesium-137, Total pCi	P28401
<input type="checkbox"/> Iodine-131, Total pCi	P28301
<input type="checkbox"/> Potassium-40, Total pCi	P75038
<input type="checkbox"/> Radium-226, Total pCi	P9501
<input type="checkbox"/> Radium-228, Total pCi	P11501
<input type="checkbox"/> Strontium-90, Total pCi	P13501
<input type="checkbox"/> Strontium-89, Total pCi	P15501
<input type="checkbox"/> Tritium pCi	P7000

Pesticides

<input type="checkbox"/> Aldrin, Whl Sampl ug/l	P39330
<input type="checkbox"/> DDD, Whl Sampl ug/l	P39360
<input type="checkbox"/> DDE, Whl Sampl ug/l	P39365
<input type="checkbox"/> DDT, Whl Sample ug/l	P39370
<input type="checkbox"/> Dieldrin, Whl Sampl ug/l	P39380
<input type="checkbox"/> Chlordane, Whl Sampl ug/l	P39350
<input type="checkbox"/> Endrin, Whl Sampl ug/l	P39390
<input type="checkbox"/> Heptachlor, Whl Sampl ug/l	P39410
<input type="checkbox"/> Hchlr-Epoide, Whl Sampl ug/l	P39420
<input type="checkbox"/> Lindane, Whl Sampl ug/l	P39782
<input type="checkbox"/> Methoxychlor, Whl Sampl ug/l	P39480
<input type="checkbox"/> Malathion, Whl Sampl ug/l	P39530
<input type="checkbox"/> Parathion, Whl Sampl ug/l	P39540
<input type="checkbox"/> Methyl Parathn, Whl Sampl ug/l	P39600
<input type="checkbox"/> Toxaphene, Whl Sampl ug/l	P39400
<input type="checkbox"/> 2, 4-D, Whl Sampl ug/l	P39730
<input type="checkbox"/> Silvex, Whl Sampl ug/l	P39750
<input type="checkbox"/> BHC, Whl Sampl ug/l	P39340
<input type="checkbox"/> Mirex, Whl Sampl ug/l	P39755
<input type="checkbox"/> Diazinon, Whl Sampl ug/l	P39570

Special Parameters

<input checked="" type="checkbox"/> PCB, Whl Sampl ug/gm	P39516	<u>291.4 ppm</u>
<input type="checkbox"/> Chlorophyll A ug/l	P32209	
<input type="checkbox"/> Phenols ug/l	P32730	
<input type="checkbox"/> Sample Purpose	P71999	
<input type="checkbox"/> Sample Code	P115	
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

Volatile Organics

<input type="checkbox"/> Chloroform, Total ug/l	P32106
<input type="checkbox"/> Methylene Chloride, Total ug/l	P34423
<input type="checkbox"/> Carbon Tetrachloride, Total ug/l	P32102
<input type="checkbox"/> Bromoform, Total ug/l	P32104
<input type="checkbox"/> Bromodichloromethane, Total ug/l	P32101
<input type="checkbox"/> Dibromochloromethane, Total ug/l	P32105
<input type="checkbox"/> 2-Dichloroethane, Total ug/l	P32103
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Distribution 1—Data Processing 2—Central Office 3—District Office 4—Owner 5—Laboratory

Industrial Chemistry Section

Environmental Sample Submission Report

Agency: O.E.P.A.
Division Program: ER WW 22-IV
Analysis Reported To: ☒ CO ☐ CDO ☐ SE
☐ NE ☐ SW ☐ NW

Laboratory: ☐ Cel ☐ NE ☐ SW ☐ NW
Sample Number: P-864
Analyst: SPB Supervisor: J. Green
Date Received: 7-8-81
Date Reported: 9-17-81

Sample Identification

Station: ACME SCRAPE ~~PI~~ IRON
ID Number: SC, 12-4-2445 1980
Address: 2101 State Rd.
City: Ashitabula Zip: _____
County: Ashitabula Phone: _____
Collected By: JAMES F. IRWIN

Grab Sample Date or Beginning Date of Composite Sample—Use Military Time

Year	Month	Day	Hour	Minute
81	07	02	14	30

Ending Date of Composite Sample—Use Military Time						CVT	ST	TYF
Year	Month	Day	Hour	Minute				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Field Treatment: ☐ Filtered ☐ CuSO₄ - H₃PO₄ ☐ Iced ☐ H₂SO₄ ☐ NaOH ☐ HNO₃ ☐ Other (Explain) _____

Additional Information—Analyst Remarks—Non Routine Analytical Requests

SAMPLE collected from Field's BRACK AT storm sewer

Radioisotopes

Alpha: Total pCi	P1501
Alpha: Diss pCi	P1503
Alpha: Susp pCi	P1505
Beta: Total pCi	P3501
Beta: Diss pCi	P3503
Beta: Susp pCi	P3505
Barium-140: Total pCi	P75030
Cesium-134: Total pCi	P28414
Cesium-137: Total pCi	P28401
Iodine-131: Total pCi	P28301
Potassium-40: Total pCi	P75038
Radium-226: Total pCi	P9501
Radium-228: Total pCi	P11501
Strontium-90: Total pCi	P13501
Strontium-89: Total pCi	P15501
Tritium pCi	P7000

Pesticides

— Aldrin. Whl Sampl ug l	P39330.
— DDD. Whl Sampl ug l	P39360.
— DDE. Whl Sampl ug l	P39365
— DDT. Whl Sample ug l	P39370.
— Dieldrin. Whl Sampl ug l	P39380.
— Chlordane. Whl Sampl ug l	P39350.
— Endrin. Whl Sampl ug l	P39390
— Heptachlor. Whl Sampl ug l	P39410.
— Hchir-Epoxyde. Whl Sampl ug l	P39420.
— Lindane. Whl Sampl ug l	P39782.
— Methoxychlor. Whl Sampl ug l	P39480.
— Malathion. Whl Sampl ug l	P39530
— Parathion. Whl Sampl ug l	P39540.
— Methyl Parathion. Whl Sampl ug l	P39500.
— Toxaphene. Whl Sampl ug l	P39400.
— 2, 4-D. Whl Sampl ug l	P39730.
— Silvex. Whl Sampl ug l	P39760.
— BHC. Whl Sampl ug l	P39340
— Mirex. Whl Sampl ug l	P39755.
— Diazinon. Whl Sampl ug l	P39570.

Special Parameters

<input type="checkbox"/> PCB, Whl Sampl ug l	P39516.
<input type="checkbox"/> Chlorophyll A ug l	P32209.
<input type="checkbox"/> Phenols ug l	P32730
<input type="checkbox"/> Sample Purpose	P71999
<input type="checkbox"/> Sample Code	P115
X PCB'S - oil AROCLOR 1254 429.5 ppm	
<input type="checkbox"/>	
<input type="checkbox"/>	

Volatile Organics

[illegible]

Distribution: 1—Data Processing 2—Central Office 3—District Office 4—Owner 5—Laboratory

111-22 IV
Ohio Department of Health
 Industrial Chemistry Section

Environmental Sample Submission Report

Agency: Ohio EPA
 Division Program: Emergency Response
 Analysis Reported To: ☒ CO ☐ CDO ☐ SE
☐ NE ☐ SW ☐ NW

Laboratory: ☐ Central ☐ SE ☐ NE ☐ SW ☐ NW
 Sample Number: P8368
 Analyst: SPB Supervisor: J. Shum
 Date Received: 4/29/81
 Date Reported: 9-1-81

12-4-2445 1980

Sample Identification

Station: 8 Burro from Drum Storage Area
 ID Number: SC, Acute Scrap Iron & Metal
 Address: 2101 State Rd
 City: Ashtabula Zip: _____
 County: Ashtabula Phone: _____
 Collected By: Mark TREF / Jim Irwin

Grab Sample Date or Beginning Date of Composite Sample—Use Military Time

Year	Month	Day	Hour	Minute
81	04	28	12	10

Ending Date of Composite Sample—Use Military Time

Year	Month	Day	Hour	Minute	CVT	S/T	TYP

Field Treatment:

Additional Information—Analyst Remarks—Non Routine Analytical Requests

- ☐ Filtered ☐ CuSO₄ - H₃PO₄ 1. Solvent Scan
☐ Iced ☐ H₂SO₄ 2. P.B. Analysis
☐ NaOH ☐ HNO₃
☐ Other (Explain)

Radioisotopes

<input type="checkbox"/> Alpha Total pCi	P1501.
<input type="checkbox"/> Alpha Diss pCi	P1503.
<input type="checkbox"/> Alpha Suspd pCi	P1505.
<input type="checkbox"/> Beta Total pCi	P3501.
<input type="checkbox"/> Beta Diss pCi	P3503.
<input type="checkbox"/> Beta Suspd pCi	P3505.
<input type="checkbox"/> Barium-140 Total pCi	P75030.
<input type="checkbox"/> Cesium-134 Total pCi	P28414.
<input type="checkbox"/> Cesium-137 Total pCi	P28401.
<input type="checkbox"/> Iodine-131 Total pCi	P28301.
<input type="checkbox"/> Potassium-40 Total pCi	P75038.
<input type="checkbox"/> Radium-226 Total pCi	P9501.
<input type="checkbox"/> Radium-228 Total pCi	P11501.
<input type="checkbox"/> Strontium-90 Total pCi	P13501.
<input type="checkbox"/> Strontium-89 Total pCi	P15501.
<input type="checkbox"/> Tritium pCi	P7000.

Volatile Organics

<input type="checkbox"/> Chloroform Total ug/l	P32106.
<input type="checkbox"/> Methylene Chloride Total ug/l	P34423.
<input type="checkbox"/> Carbon Tetrachloride Total ug/l	P32102.
<input type="checkbox"/> Bromoform Total ug/l	P32104.
<input type="checkbox"/> Bromodichloromethane Total ug/l	P32101.
<input type="checkbox"/> Dibromochloromethane Total ug/l	P32105.
<input type="checkbox"/> 1,2-Dichloroethane Total ug/l	P32103.
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Pesticides

<input type="checkbox"/> Aldrin Whl Sampl ug/l	P39330.
<input type="checkbox"/> DDD Whl Sampl ug/l	P39360.
<input type="checkbox"/> DDE Whl Sampl ug/l	P39365.
<input type="checkbox"/> DDT Whl Sample ug/l	P39370.
<input type="checkbox"/> Dieldrin Whl Sampl ug/l	P39380.
<input type="checkbox"/> Chlordane Whl Sampl ug/l	P39350.
<input type="checkbox"/> Endrin Whl Sampl ug/l	P39390.
<input type="checkbox"/> Heptachlor Whl Sampl ug/l	P39410.
<input type="checkbox"/> Hept-Epoxyde Whl Sampl ug/l	P39420.
<input type="checkbox"/> Lindane Whl Sampl ug/l	P39782.
<input type="checkbox"/> Methoxychlor Whl Sampl ug/l	P39480.
<input type="checkbox"/> Malathion Whl Sampl ug/l	P39530.
<input type="checkbox"/> Parathion Whl Sampl ug/l	P39540.
<input type="checkbox"/> Methyl Parathion Whl Sampl ug/l	P39600.
<input type="checkbox"/> Toxaphene Whl Sampl ug/l	P39400.
<input type="checkbox"/> 2,4-D Whl Sampl ug/l	P39730.
<input type="checkbox"/> Silvex Whl Sampl ug/l	P39760.
<input type="checkbox"/> BHC Whl Sampl ug/l	P39340.
<input type="checkbox"/> Mirex Whl Sampl ug/l	P39755.
<input type="checkbox"/> Diazinon Whl Sampl ug/l	P39570.

Special Parameters

<input checked="" type="checkbox"/> PCB Whl Sampl ug/l <u>ARCHLOR 1254</u>	P39516	<u>13.02</u>
<input type="checkbox"/> Chlorophyll "A" ug/l	P32209.	
<input type="checkbox"/> Phenols ug/l	P32730.	
<input type="checkbox"/> Sample Purpose	P71999.	
<input type="checkbox"/> Sample Code	P115.	
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

Distribution 1—Data Processing 2—Central Office 3—District Office 4—Owner 5—Laboratory

Ohio Department of Health

Industrial Chemistry Section

Environmental Sample Submission Report

Agency: OEPA
 Division Program: W20-IV
 Analysis Reported To: ☐ CO ☐ CDO ☐ SE
☒ NE ☐ SW ☐ NW

Laboratory: ☐ Central ☐ SE ☐ NE ☐ SW ☐ NW
 Sample Number: 8-8194
 Analyst: Mr. [Signature] Supervisor: [Signature]
 Date Received: 3-26-81
 Date Reported: 4/9/81

Sample Identification

Station: State St. Storm Sewer
 ID Number: SC
 Address: (S.E. corner)
 City: Ashtabula Zip:
 County: Ashtabula Phone:
 Collected By: Tuckermach

Grab Sample Date or Beginning Date of Composite Sample—Use Military Time

Year Month Day Hour Minute
8/10/325/1045

Ending Date of Composite Sample—Use Military Time

Year Month Day Hour Minute CVT ST TYP

Field Treatment:

- ☐ Filtered ☐ CuSO₄ - H₃PO₄
☐ Iced ☐ H₂SO₄
☐ NaOH ☐ HNO₃
☐ Other (Explain)

Additional Information—Analyst Remarks—Non Routine Analytical Requests

Spill Acme Scrap
Fields Brook

Radioisotopes

<input type="checkbox"/> Alpha, Total pc/l	P1501.
<input type="checkbox"/> Alpha, Diss pc/l	P1503.
<input type="checkbox"/> Alpha, Suspd pc/l	P1505.
<input type="checkbox"/> Beta, Total pc/l	P3501.
<input type="checkbox"/> Beta, Diss pc/l	P3503.
<input type="checkbox"/> Beta, Suspd pc/l	P3505.
<input type="checkbox"/> Barium-140, Total pc/l	P75030.
<input type="checkbox"/> Cesium-134, Total pc/l	P28414.
<input type="checkbox"/> Cesium-137, Total pc/l	P28401.
<input type="checkbox"/> Iodine-131, Total pc/l	P28301.
<input type="checkbox"/> Potassium-40, Total pc/l	P75035.
<input type="checkbox"/> Radium-226, Total pc/l	P9501.
<input type="checkbox"/> Radium-228, Total pc/l	P11501.
<input type="checkbox"/> Strontium-90, Total pc/l	P13501.
<input type="checkbox"/> Strontium-89, Total pc/l	P15501.
<input type="checkbox"/> Thorium pc/l	P7000.

Pesticides

<input type="checkbox"/> Aldrin, Whl Sampl ug/l	P39330.
<input type="checkbox"/> DDD, Whl Sampl ug/l	P39380.
<input type="checkbox"/> DDE, Whl Sampl ug/l	P39385.
<input type="checkbox"/> DDT, Whl Sample ug/l	P39370.
<input type="checkbox"/> Dieldrin, Whl Sampl ug/l	P39380.
<input type="checkbox"/> Chlordane, Whl Sampl ug/l	P39350.
<input type="checkbox"/> Endrin, Whl Sampl ug/l	P39390.
<input type="checkbox"/> Heptachlor, Whl Sampl ug/l	P39410.
<input type="checkbox"/> Hchl-Epoxyde, Whl Sampl ug/l	P39420.
<input type="checkbox"/> Lindane, Whl Sampl ug/l	P39782.
<input type="checkbox"/> Methoxychlor, Whl Sampl ug/l	P39480.
<input type="checkbox"/> Malathion, Whl Sampl ug/l	P39530.
<input type="checkbox"/> Parathion, Whl Sampl ug/l	P39540.
<input type="checkbox"/> Methyl Parathn, Whl Sampl ug/l	P39800.
<input type="checkbox"/> Toxaphene, Whl Sampl ug/l	P39400.
<input type="checkbox"/> 2, 4-D, Whl Sampl ug/l	P39730.
<input type="checkbox"/> Silve, Whl Sampl ug/l	P39780.
<input type="checkbox"/> BHC, Whl Sampl ug/l	P39340.
<input type="checkbox"/> Mirex, Whl Sampl ug/l	P39755.
<input type="checkbox"/> Diazinon, Whl Sampl ug/l	P39570.

Volatile Organics

<input type="checkbox"/> Chloroform, Total ug/l	P32106.
<input type="checkbox"/> Methylene Chloride, Total ug/l	P34423.
<input type="checkbox"/> Carbon Tetrachloride, Total ug/l	P32102.
<input type="checkbox"/> Bromoform, Total ug/l	P32104.
<input type="checkbox"/> Bromodichloromethane, Total ug/l	P32101.
<input type="checkbox"/> Dibromochloromethane, Total ug/l	P32105.
<input type="checkbox"/> 1, 2-Dichloroethane, Total ug/l	P32103.
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Special Parameters

<input checked="" type="checkbox"/> PCB, Whl Sampl ug/l	P39516.
<input type="checkbox"/> Chlorophyll "A" ug/l	P32209.
<input type="checkbox"/> Phenols ug/l	P32730.
<input type="checkbox"/> Sample Purpose	P71999.
<input type="checkbox"/> Sample Code	P115.
<u>PCB's ug/l ARCLOR 1016</u>	<u>23.8</u>
<u>11 1254</u>	<u>71.8</u>
<input type="checkbox"/>	
<input type="checkbox"/>	

Distribution: 1—Data Processing 2—Central Office 3—District Office 4—Owner 5—Laboratory

Comparison of USEPA Survey Results
and NPDES Permit Limits

<u>Outfall/Parameter</u>	USEPA January 22-23, 1980 <u>Survey Results</u>		<u>NPDES Permit Limits</u>			
	Concen- tration (mg/l)	Loading (lbs)	Concentration (mg/l)		Loading (lbs)	
			<u>30 day</u>	<u>Daily</u>	<u>30 day</u>	<u>Daily</u>
<u>Outfall 001/</u>						
Suspended Solids	< 5	0	15	30	139	276
Dissolved Solids	3995	35608	5000	5700	46305	52479
Total Chromium	0.006	0.053	0.06	0.12	0.55	1.10
Total Copper	0.009	0.080	0.06	0.12	0.55	1.10
Total Zinc	0.152	1.355		0.36		3.31
Residual Chlorine	0.0		0.1	0.3		
 <u>Outfall 002</u>						
BOD ₅	10		10	15		
Suspended Solids	< 5		12	18		

REPORT BY: Thomas A. Bontine
 DATE: May 15, 1979

CHD EPA
 QUARTERLY NON-COMPLIANCE REPORT
 REPORTING PERIOD: January, February, March, 1979
 EFFECT AT 2 WEEKS STATUS

DISTRICT: Northwest
 PAGE 24 of 26

HAZARD LIST

COMPLIANCE STATUS

ACTION TAKEN OR PROPOSED

COMMENTS

NAME: Glendon-Duckens Co.

Address:

APDES NO. GHO000523

FAIR 31500013

EFFECTIVE 11/20/78

FOR EFF. / /

FOR EFF. / /

FOR EFF. / /

FOR EFF. / /

FOR EFF. / /

EXPIRES: 7/31/81

Efficient
 January
 001

pH

1 significant violation

Reported: Values ranging down to

Permit: 2.5 S.U. (minimum)
 6.0 S.U. (minimum)

3/15/79 - Letter sent to entity
 noting permit violations for
 the month of January.

4/15/79 - Letter sent to entity
 noting permit violations for
 the month of February.

5/10/79 - Letter sent to entity
 noting permit violations for
 the month of March.

Permit renewal requested by EDP.

3/26/79 - Letter sent by entity
 explaining January non-compliance.

3/30/79 - Letter sent by entity
 indicating February non-compliance.

4/9/79 - Letter sent by entity
 indicating March non-compliance.

February
 001

pH

3 significant violations

Reported: Values ranging up to

Permit: 9.5 S.U. (maximum)
 9.0 S.U. (maximum)

March
 001

pH

5 significant violations

Reported: Values ranging up to

Permit: 10.2 S.U. (maximum)
 Values ranging down to
 3.0 S.U. (minimum)
 9.0 S.U. (maximum)
 6.0 S.U. (minimum)

DATE: INITIAL
 REVIEW: X

Events
 January, February, March
 In Compliance

SUBMITTED BY: Thomas A. Romine

DATE SUBMITTED: August 21, 1972

2 of 4
 ON FILE
 QUARTERLY NON-COMPLIANCE REPORT
 REPORTING PERIOD: April, May, June, 1972
 EFFLUENT & EVENTS STATUS

DISCLOSURE

PAGE 22

MAJOR LIST	COMPLIANCE STATUS	ACTION TAKEN OR PROPOSED	COMMENTS
NAME Glidden-Durkee Co.	Effluent	5/23/79 - OEPA Compliance	Permit renewal appealed to EDR.
Ashtabula	April	Sampling Survey conducted.	5/18/79 - Letter of noncompliance received from entity indicating April violations.
PERMITS NO. QU0000523	Outfall 001	6/7/79 - Enforcement letter sent to entity from district Re: April violations.	5/23/79 - Discussed noncompliance events with entity during compliance inspection of facility. Replacement of equipment installed.
TYPE 31000013	23 significant violations Reported: Up To 9.8 S.U. (max) Down To 3.2 S.U. (min) Permit: 9.0 S.U. (max) 6.0 S.U. (min)		
EFFECTIVE 11/20/78			
OD. EFF. 7/7	May-June		4/17/79 - EDR vacates Permit E313*CD. (SCH Corporation vs Melvoy EDR 78-110) Board rules OEPA cannot issue draft permits and final actions of the Director, but must issue Proposed actions and Final actions. Adjudication hearings are possible with proposed actions. OEPA has appealed the EDR decision to Court.
OD. EFF. 7/7	In Compliance with terms and conditions of Permit E 313*ND.		
OD. EFF. 7/7			
OD. EFF. 7/7			
OD. EFF. 7/7			
EXPIRES: 12/31/81			
TYPE: INITIAL	Exempt		6/13/79 - Letter received from entity indicating SCH will operate under the terms and conditions of the last effective permit E313. Monthly operating reports submitted for May were under this format.
RENEWAL: X	April, May, June In Compliance		

SUBMITTED: October 30, 1979

QUARTERLY NON-COMPLIANCE REPORT
REPORTING PERIOD: July, August, September, 1979
EFFLUENT & EVENTS STATUS

PAGE

MAJOR LIST	COMPLIANCE STATUS	ACTION TAKEN OR PROPOSED	COMMENTS
Glidden-Durkee Co.	Effluent	10/4/79 - Compliance Sampling	Permit renewal requested to EPA.
Ashtabula	July, August, September In Compliance with E 313 DD permit limits.	Inspection Report sent to entirely by District. Results Company in Substantial Com- pliance with permit.	
NO. 00000523			
11100013			
DATE <u>11/29/79</u>			
EFF. <u> / / </u>			
EFF. <u> / / </u>			
EFF. <u> / / </u>			
EFF. <u> / / </u>			
EFF. <u> / / </u>			
TEST <u>1/31/81</u>			
INITIAL <u> </u>	Evening		
RENEWAL <u> X </u>	July, August, September In Compliance		

TESTED BY: Th A. Rowing

SUBMITTED: February 22, 1980

404 41

OHIO EPA
QUARTERLY NON-COMPLIANCE REPORT
REPORTING PERIOD: October, November, December, 1979
EFFLUENT & EVENTS STATUS

DISTRICT:

PAGE 22 OF

MAJOR LIST	COMPLIANCE STATUS	ACTION TAKEN OR PROPOSED	COMMENTS
Blidden-Duckee Co.	Effluent	1/22-23/80 - Compliance Sam-	Permit renewal appealed to EHR.
	October, November, December	pling Inspection conducted by	
Whitcomb	In Compliance with 1313-BD permit	District.	12/10/79 - Company is now volun-
NO. 000000521	limits.		tarily reporting under the terms
11EC0013			and conditions of the 1313-BD per-
			mit.
IVE	11/20/78		
FF.	L-L		
FF.	L-L		
FF.	L-L		
FF.	L-L		
FF.	L-L		
FF.	L-L		
SI	1/31/81		

INITIAL
RENEWAL Y

Events
October, November, December
In Compliance

Comparison of USEPA Survey Results and
Ohio Water Quality Standards

<u>Parameter</u>	<u>Upstream (mg/l)</u>	<u>Plant Discharge (001) (mg/l)</u>	<u>Downstream (mg/l)</u>	<u>Ohio WQS Warmwater Habitat (mg/l)</u>
Ammonia-N	0.42	—	0.16	3.4
Beryllium	<0.001	<0.001	<0.001	1.100
Cadmium	<0.002	<0.002	<0.002	0.012
T. Residual Chlorine	—	0.0	—	0.002
Chromium	<0.005	0.006	<0.005	0.100
Copper	<0.006	0.009	0.017	0.005*
Cyanide	—	--	--	0.025
Dissolved Oxygen	12.5	8.7-8.9	9.5	5.0
Dissolved Solids	300	3995	2906	1500
Iron	0.987	0.208	0.239	1.000
Lead	<0.030	<0.030	<0.030	0.030
MBAS	--	--	--	0.500
Mercury	0.0008	0.0003	0.0002	0.0002
Nickel	<0.030	<0.030	<0.030	0.01 x 96 hour LC ₅₀
Oil and Grease	—	--	--	5.0
Pesticides	--	None Detected	—	Numerous limits for different pesticides
pH	7.2	6.4-6.6	7.9	6.5-9.0
Phenolic Compounds	<0.002	<0.002	<0.002	0.010
Phosphorus	0.10		0.04	1.0
Phthalate esters	--	None Detected	—	0.003
PCB's	—	None Detected	—	0.000001
Selenium	—	--	--	0.01 x 96 hour LC ₅₀
Silver	<0.003	<0.003	<0.003	0.01 x 96 hour LC ₅₀
Zinc	<0.050	0.152	<0.050	0.040*
Temperature (°C)	0.0	14.0-16.0	10.0	9.4

*Limit based on the calculated downstream hardness of 78.5 mg/l.

SWM

000274

TABLE A-27

Field Survey Data
Sherwin Williams
T102 Pond Influent

Date	Time	Temp. °C	Flow gpm	pH	Alkalinity mg/l as CaCO ₃	Acidity mg/l as CaCO ₃	Susp. Solids mg/l	Dis. Solids mg/l	Chlorides mg/l	Chlorine Total Free	COD mg/l	Total Phosphorus as PO ₄
9/24/70	0910	40.5		8.94	68.5		240	6,370	1,910			
9/25/70	0910	40		7.48	76		470	3,170				
9/28/70	0910	34		13.52	2,500		2,440	37,190				
9/29/70	0910	34.5		12.88	900		5,310	15,670				
9/30/70	0910	40		2.58		170	650	6,320			93	
10/1/70	0910	36		12.18	1,900		1,190	9,800			178	
10/2/70	0510	39		9.54	74		590	5,600	3,620		214	
10/5/70	2010	36		8.51	17		230	3,340	2,100			
10/6/70	1910	39		1.51		2,400	440	4,030	2,960			
10/7/70	1410	42		7.54	12		* 920	*8,970	4,560			
10/8/70	2010	44		9.50	106				4,470			
10/13/70	1110	44		12.6	3,000		640	12,380	3,000			
10/14/70	0710	41		7.08			540	4,830	2,640			
10/15/70	1310	41		1.52		2,420	480	3,370	2,420		45	
10/16/70	1410	36		2.72		340	725	4,320	1,260		448	
10/19/70	1810	16		12.82	4,600		7,050	10,790	1,560		244	
10/20/70	1010	22		6.98			350	1,220	530		128	
10/21/70	1310	20					110	1,240			31	
10/22/70	2015	19.5		2.76		216					192	
10/23/70	1815	17		11.65	441						24	
10/26/70	0715	22		7.00					86		17	
10/27/70	1115	23.5		7.70	20		30	370	75		63	
10/28/70	1415	21		2.29		17.8	710	3,510	2,381		135	
11/2/70	1015	38					440	7,980			284	
11/3/70	1015	30					1,840	6,250			547	
11/5/70	0715	30		9.97	96		690	4,000	2,068		504	
11/6/70	1515	36					650	7,180			283	
11/9/70	1115	33.5					990	4,520			397	
11/11/70	1415	37.5					480	5,360			619	
11/12/70	1915	33					530	2,770			182	
11/16/70	1015	40						9,040			98	
11/17/70	1015	33					1,360	6,500			35	

See SW-2 for Flow Measurement

TABLE A-28

Field Survey Data
 Sherwin Williams
 TiO₂ Pond Effluent

Date	Time	Temp. °C	Flow gpm	pH	Alkalinity mg/l as CaCO ₃	Acidity mg/l as CaCO ₃	Susp. Solids mg/l	Dis. Solids mg/l	Chlorides mg/l	Chlorine Total Free	COD mg/l
9/24/70	0915	32		9.31	74		90	7,145	2,600		
9/25/70	0915	32.5		7.10	35			3,930			
9/28/70	0915	21		12.82	420		120	10,390			
9/29/70	0915	18		12.30	480		130	7,810			
9/30/70	0915	24		11.81	135		90	6,915			36
10/1/70	0915	26		2.34		3,860	50	8,790			132
10/2/70	0515	27		10.52	160		110	8,660	3,620		112
10/5/70	2015	25.5	195	11.80	625		30	6,390	2,180		
10/6/70	1915	27	225	6.91			60	6,020	2,840		
10/7/70	1415	29	225	8.02	21		*330	*9,350	4,240		
10/8/70	2015	33	210	7.29	13				3,760		
10/13/70	1115	23	310	10.19	246		2,110	7,780	3,300		
10/14/70	0715	27	230	10.32	380		10	8,880	2,480		90
10/15/70	1315	27	420	11.42	496		40	7,020	2,620		40
10/16/70	1415	22	*260	11.30	362		20	6,860	2,720		44
10/19/70	1815	19.5	0	4.81		38	30	2,490	1,060		128
10/20/70	1015	17	65	12.12	329		10	6,860	3,040		92
10/21/70	1315	19	72				20	11,630			37
10/22/70	2020	17	85	12.63	3,060						132
10/23/70	1850	19	62	12.80	5,800				1,550		39
10/26/70	0720	16.5	30	12.25	1,195				606		34
10/27/70	1120	15	560	11.38	239		40	1,690	837		70
10/28/70	1420	15	118	9.32	36		30	1,730			188
11/2/70	1020	23	51				40	4,290			53
11/3/70	1020	15.5	225				70	5,950			83
11/5/70	0720	17.5	210	10.04	71		30	3,390	1,640		126
11/6/70	1520	22	390				10	3,010			259
11/9/70	1120	24	245				80	6,470			211
11/11/70	1420	24.5	245				500	6,260			51
11/12/70	1920	22	150				30	3,440			168
11/16/70	1020	21.5					30	7,400			128
11/17/70	1020	23	250				20	8,220			
11/19/70	0920		140								

*Analytical result questionable

SW

006272

TABLE A-29

Field Survey Data
 Sherwin Williams
 No. 1 Ditch

Date	Time	Temp. °C	Flow gpm	pH	Alkalinity mg/l as CaCO ₃	Acidity mg/l as CaCO ₃	Susp. Solids mg/l	Dis. Solids mg/l	Chlorides mg/l	Chlorine Total Free	COD mg/l	Total Sulfur mg/l
9/24/70	0920	30		8.35	63		2	190	700			
9/25/70	0920	50		7.32	19			270				
9/28/70	0920	20		9.08	70		90	825				
9/29/70	0920	40		9.92	23		140	600				
9/30/70	0920	48		9.68	45		48	240				
10/1/70	0920	43		7.56	4						19	
10/2/70	0520	42		7.89	10		15	240	80		9	
10/5/70	2020	28		8.80	8		40	150	70			
10/6/70	1920	41.5		6.82		1	30	370	95			
10/7/70	1420	46		7.15	2		*310	*200	87			
10/8/70	2020	47		7.69	10				96			
10/13/70	1120	42		7.20	12		60	470	94			
10/14/70	0720	42.5		7.09			10	570	68			
10/15/70	1320	42.5		7.08			20	210	96		40	
10/16/70	1420	21		5.29		25	50	275	93		174	
10/19/70	1820	13.5		7.45	6		220	1,480	319		71	
10/20/70	1020	11		6.13		20	50	910	240		79	
10/21/70	1320	16					700	2,100			53	
10/22/70	2025	15		8.03	45						20	
10/23/70	1855	15		11.40	396						52	
10/26/70	0725	19.5		7.00					48	0.1 0	9	
10/27/70	1125	38.5		7.97	20		60	300	43		268	
10/28/70	1425	24		7.42	18.2		10	310	53		13	
11/2/70	1025	44					20	360			31	
11/3/70	1025	29					60	530			22	
11/5/70	0725	19.5		8.09	11		50	240	62		17	
11/6/70	1525	42					20	150			9	
11/9/70	1125	33					50	290			4	
11/11/70	1425	21					0	240			22	
11/12/70	1925	47					0	200			25	
11/16/70	1025	40					170	1,000			27	
11/17/70	1025	22.5					40	310			0	
11/19/	0925											

*Analytical result questionable

GMM 600273

TABLE A-30

Field Survey Data
 Sherwin Williams
 Chemicals Pond Influent

Date	Time	Temp. °C	Flow gpm	pH	Alkalinity mg/l as CaCO ₃	Acidity mg/l as CaCO ₃	Susp. Solids mg/l	Dis. Solids mg/l	Chlorides mg/l	Chlorine Total Free	COD mg/l	Total Sulfur as SO ₄
9/24/70	0900	28		8.00	89		2	1,860	460			
9/25/70	0900	32		7.70	90		130	1,120				
9/28/70	0900	30.5		5.34		110	220	1,010				
9/29/70	0900	30.5		5.21		59	170	1,020				
9/30/70	0900	29		6.89		31	330	1,050			145	
10/1/70	0900	30		7.62	25		155	985			112	
10/2/70	0500	33		6.68		14	320	870	3,140		330	
10/5/70	2000	35		10.32	80		1,030	920	340			
10/6/70	1900	33		7.69	32		220	950	63			
10/7/70	1400	30		6.70		8	*710	*820	125			
10/8/70	2000	31		7.92	33				130			
10/13/70	1100	28		8.10	123		310	1,130	30			
10/14/70	0700	29		8.19	34		180	970	35			
10/15/70	1300	29		7.89	25		120	710	27		130	
10/16/70	1400	20		7.12	9		40	690	19		107	
10/19/70	1800	30		8.25	66		410	1,990	45		200	
10/20/70	1000	27.5		8.10	43		150	1,310	199		260	
10/21/70	1300	32					170	1,290			128	
10/22/70	2000	33.5		8.60	77						502	
10/23/70	1830	33		6.80		6					264	
10/26/70	0700	35		7.00					90		334	
10/27/70	1100	30		11.51	230		520	1,520			566	
10/28/70	1400	22		7.45	7		30	950	75		214	
11/2/70	1000	37					330	1,430			280	
11/3/70	1000	31					420	1,430			414	
11/5/70	0700	29		3.96		724	410	1,520	27		246	
11/6/70	1500	31					470	1,600			279	
11/9/70	1100	30					520	1,290			246	
11/11/70	1400	34					340	1,640			477	
11/12/70	1900	36					200	1,720			271	
11/16/70	1000	28					130	1,220			235	
11/17/70	1000	25.5					170	1,660			260	
11/19/70	0900											

See SW-5 for Flows

* Analytical result questionable

WWS
000274

TABLE A-31

Field Survey Data
 Sherwin Williams
 Chemicals Pond Effluent

Date	Time	Temp. °C	Flow gpm	pH	Alkalinity mg/l as CaCO ₃	Acidity mg/l as CaCO ₃	Susp. Solids mg/l	Dis. Solids mg/l	Chlorides mg/l	Chlorine Total Free	COD mg/l	Total Phosphorus mg/l
9/24/70	0905	23		7.79	74		90	1,200	700			
9/25/70	0905	22.5		7.18	45			1,230				
9/28/70	0905	18.5		8.14	84		20	1,220				
9/29/70	0905	16		7.45	78		40	1,170				
9/30/70	0905	15		7.68	92		30	1,400			93	
10/1/70	0905	16	140	7.57	11		14	1,220			85	
10/2/70	0505	16	167	7.87	17		30	1,060	30		95	
10/5/70	2005	16	136	8.09	10		7	880	67			
10/6/70	1905	19	189	7.42	8		0	930	63			
10/7/70	1405	20	195	7.04			*230	*700	64			
10/8/70	2005	21.5	178	7.61	10				75			
10/13/70	1105	20	156	7.82	17		20	1,020	45			
10/14/70	0705	18.5		7.93	17		30	1,080	58			
10/15/70	1305	18.5	156	7.69	17		10	800	56		161	
10/16/70	1405	15	108	7.65	28		10	940	56		134	
10/19/70	1805	15	47	7.88	19		20	1,020	49		111	
10/20/70	1005	14	77	8.22	21		90	1,020	104		132	
10/21/70	1305	15	93				40	1,320			97	
10/22/70	2005	17.5	77	8.50	34						338	
10/23/70	1835	18	101	9.03							196	
10/26/70	0705	16.5	70	6.90					118		240	
10/27/70	1105	17	93	8.12	36		0	1,450	138		277	
10/28/70	1405	16	93	7.01			10	1,580	146		262	
11/2/70	1005	17	41				20	1,580			232	
11/3/70	1005	16					60	870			223	
11/5/70	0705	15	68	7.73	18		10	1,460	25		233	
11/6/70	1505	13.5	6				20	1,520			218	
11/9/70	1105	16	77				10	1,620			246	
11/11/70	1405	17	33				10	1,830			249	
11/12/70	1905	17	64				10	2,000			280	
11/16/70	1005	11	92				10	2,010			306	
11/17/70	1005	10	77				30	1,820			277	
11/19	0905		33									

*Analytical result questionable

SPM 000275

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

In the Matter of:)	Amended Response of SCM Corporation
)	to the May 16, 1986 U.S. EPA
FIELDS BROOK)	Request for Information Pursuant
ASHTABULA COUNTY, OHIO)	to Section 104 of the Comprehensive
)	Environmental Response, Compen-
)	sation and Liability Act of 1980,
)	42 U.S.C. §9604, and Section 3007
)	of the Resource Conservation and
)	Recovery Act, 42 U.S.C. §6927.

INTRODUCTORY STATEMENT

SCM Corporation hereby submits this amended and final response to the May 16, 1986 U.S. EPA Request for Information concerning Fields Brook. This response incorporates by reference and treats as being produced herewith documents numbered 1 through 1527 which were previously produced on June 20 and 25, 1986. Because SCM currently operates two plants in Ashtabula, separate certifications are being submitted with respect to each plant.

SCM respectfully objects to this request, as it violates the Paperwork Reduction Act of 1980. Similarly, SCM objects to the individual questions which do not pertain to solid or hazardous wastes or hazardous substances, as they are beyond EPA's information gathering authority under 42 U.S.C. §§6927 and 9604. Without waiving these objections or its rights not to respond to this request, SCM is voluntarily answering this request to the extent set forth herein.

Some of the requests seek a considerable amount of information which has previously been submitted to EPA and/or Ohio EPA. In order to avoid the unnecessary burden of submitting documents which EPA already has and thereby complicating the task of document review and maintenance, SCM is describing some documents but not producing them herewith. If EPA no longer has these documents, SCM will provide the agency with copies of such documents or an opportunity to copy them at EPA's request.

In addition to the above objections, SCM also objects to several of the instructions. SCM objects to requests to provide home addresses of individuals where business addresses are given. SCM objects to the instruction requiring it to provide estimates and its method of estimation where specific responsive information is not available or accessible. SCM objects to instructions requiring it to respond based on information in possession or control of third persons, including retained counsel. In addition, SCM specifically objects to the instructions to the extent that they seek the disclosure of attorney-client privileged communications. SCM also objects to the instructions calling for continuing or correcting responses based on information acquired after the submission of a complete response to the Request.

REQUEST FOR INFORMATION

1) Please provide the date, State of incorporation, registered agent and his address for SCM Corporation (Glidden-Durkee Division) (hereinafter referred to as SCM).

Response:

SCM Corporation was incorporated under the laws of the State of New York on October 30, 1924. Its registered agent is CT Corporation System, 1633 Broadway Ave., New York; New York 10019.

2) Provide the addresses of all facilities that have ever been owned or operated by SCM in the Fields Brook water basin in Ashtabula County, Ohio. If any of the facilities that have been operated by SCM were not at all times of operation owned by SCM, provide the name(s) of the other owner(s) of the facility and a description of each property's location.

Response:

SCM Corporation
Ashtabula Plant 1
2900 Middle Road
P.O. Box 310
Ashtabula, Ohio 44004

SCM Corporation
Ashtabula Plant 2
2426 Middle Road
P.O. Box 160
Ashtabula, Ohio 44004

Plant 2 is comprised of four parcels of land:

- 1) The TiO_2 Plant at 2426 Middle Road
- 2) The TiCl_4 Plant at 1704 State Road

- 3) Vacant land fronting on Middle Road across from the TiO_2 Plant
Vacant land fronting State Road across from the $TiCl_4$ Plant

See responses to questions 6 and 8 regarding prior owners and operators of these plants.

3) If any of the property owned by SCM in the Fields Brook water basin has been sold, leased or interests in said property otherwise conveyed by SCM to a third party or by a third party to SCM, state that party's name and the dates of any conveyance or sale.

Response:

SCM purchased Plant 1 from The Sherwin-Williams Company as of October 11, 1974.

SCM purchased Plant 2 from Gulf & Western Industries, Inc., as of July 15, 1983.

4) Provide a legal description of any SCM facilities or property located in the Fields Brook water basin in Ashtabula County, Ohio.

Response:

SCM Plant 1 -- 2900 Middle Road

Situated in the Township of Ashtabula, County of Ashtabula and State of Ohio and known as being part of Lots Nos. Two (2), Three (3), Six (6) and Ten (10) Old Survey and part of Lots Nos. Four (4), Five (5), Eight (8) and Nine (9) of the Erie Tract in said Ashtabula Township and bounded and described as follows:

Beginning at the intersection of the centerline of Middle Road, 60 feet wide, and the centerline of Cook Road, 36 feet wide;

Thence South $0^{\circ} 33' 17''$ West along the centerline of Cook Road 1993.06 feet to the Northwestern right of way line of the New York Central Railroad;

Thence South $69^{\circ} 52' 14''$ West along said Northwestern right of way line 451.32 feet to an angle point on the Westerly line of Lot No. 6 as aforesaid;

Thence South $0^{\circ} 32' 14''$ West along said Westerly line 5.34 feet to a point on the Northwestern right of way line of the New York Central Railroad;

Thence South $69^{\circ} 52' 14''$ West along said Northwestern right of way line 3050.11 feet to the Southeasterly corner of land conveyed to The Cleveland Electric Illuminating Company by Deed dated December 4, 1964 and recorded in Volume 646, Page 137 of Ashtabula County Records of Deeds;

Thence North $36^{\circ} 44' 42''$ West along the Easterly line of land conveyed to The Cleveland Electric Illuminating Company as aforesaid 179.88 feet to the most Northerly corner thereof, said point being on the Easterly line of land conveyed to The Cleveland Electric Illuminating Company by Deed dated May 16, 1964 and recorded in Volume 638, Page 467 of Ashtabula County Records;

Thence North $0^{\circ} 44' 11''$ East along the Easterly line of land conveyed to The Cleveland Electric Illuminating Company as last aforesaid 178.96 feet to the centerline of Middle Road;

Thence North $50^{\circ} 23' 11''$ East along the centerline of Middle Road 1031.88 feet to an angle point;

Thence continuing North $49^{\circ} 40' 00''$ East along the centerline of Middle Road 3433.48 feet to the place of beginning and containing 90.9399 acres of land according to the survey of Glaus Pyle and Schomer Architect and Consulting Engineers dated August 30, 1966 by Joseph T. Maney, Registered Surveyor and recertified by Edward G. Delfs, Registered Surveyor, dated October 8, 1974, be the same more or less but subject to all legal highways.

SCM Plant 2

1. T₁O₂ Plant --
2426 Middle Road

Situated in the Township of Ashtabula, County of Ashtabula, State of Ohio and being part of Lots 7 & 8, Erie Tract;

Beginning at a point in the centerline of Middle Rd. at the Easterly R/W Line of the Penn-Central R.R.;

Thence North $89^{\circ} 27'$ East, along the centerline of Middle Rd., 5.07 feet to a spike in an angle therein;

Thence North $88^{\circ} 40' 45''$ East, along the centerline of Middle Rd., 1127.23 feet to a point in an angle therein;

Thence North $88^{\circ} 09' 45''$ East, along the centerline of Middle Rd., 454.46 feet to a point in the westerly line of land now owned by The Cleveland Electric Illuminating Company;

Thence South $18^{\circ} 27' 30''$ East, along the westerly line of The Cleveland Electric Illuminating Company, 20.87 feet to an iron pin in the southerly line of Middle Rd.; thence in the same course, 187.80 feet to an iron pin in an angle therein;

Thence South $0^{\circ} 03' 30''$ East, along the westerly line of The Cleveland Electric Illuminating Company, 326.00 feet to an iron pin in the northerly R/W line of the Penn-Central R.R.;

Thence Southwesterly along the northerly R/W line of the Penn-Central R.R. by the following courses,

South $69^{\circ} 09'$ West, 107.88 feet to an iron pin;

South $0^{\circ} 05' 30''$ West, 10.70 feet to an iron pin;

South $69^{\circ} 09'$ West, 933.68 feet to an iron pin;

North $20^{\circ} 51'$ West, 5.00 feet to an iron pin;

South $69^{\circ} 09'$ West, 714.57 feet to an iron pin;

South $0^{\circ} 30'$ East, 5.33 feet to an iron pin;

South $69^{\circ} 09'$ West, 251.77 feet to a concrete R.R. monument;

Thence northeasterly along a curve in the easterly R/W line of the Penn-Central R.R., having an angle of $46^{\circ} 41' 20''$, a radius of 758.28 feet, an arc distance of 617.90 feet, a chord bearing and distance of North $22^{\circ} 50' 40''$ East, 595.70 feet to a point in the point of tangent;

Thence North $0^{\circ} 30'$ West, along the easterly R/W line of the Penn-Central R.R., 640.36 feet to an iron pin in the southerly line of Middle Rd.; thence in the same course, 20 feet to the place of beginning and containing 31.70 acres of land.

Subject to and together with all easements of record.

2. T,Cl, Plant --
1704 State Road

Situated in the Township of Ashtabula, County of Ashtabula, State of Ohio, and being part of the Holmes Tract;

Beginning at a point in the centerline of State Rd., 115 feet northerly from the centerline of Middle Rd., as measured along the centerline of State Rd.

Thence North $0^{\circ} 39'$ West, along the centerline of State Rd., 492.47 feet to an iron pin monument in an angle therein;

Thence North $0^{\circ} 03' 30''$ West, along the centerline of State Rd., 298.60 feet to a point in the southwest corner of land now owned by Detrex Chemical Industries, Inc.;

Thence South $87^{\circ} 23' 30''$ E. along the southerly line of Detrex Chemical Industries, Inc., 30.03 feet to an iron pin in the easterly line of State Rd.; thence in the same course, 1520.22 feet to an iron pin;

Thence South $0^{\circ} 17' 30''$ East, 397.85 feet to an iron pin;

Thence South $11^{\circ} 40' 45''$ West, 361.47 feet to an iron pin;

Thence South $89^{\circ} 27'$ West, parallel with the centerline of Middle Rd., 1401.06 feet to an iron pin;

Thence North $0^{\circ} 39'$ West, parallel with the centerline of State Rd., 45 feet to an iron pin;

Thence South $89^{\circ} 27'$ West, parallel with the centerline of Middle Rd., 40 feet to an iron pin in the easterly line of State Rd.; thence in the same course, 30 feet to the place of beginning and containing 27.829 acres of land.

Subject to and together with all easements of record.

3. Vacant land fronting on Middle Road
Across from T,O, Plant.

Situated in the Township of Ashtabula, County of Ashtabula, State of Ohio, and being part of Lots 5 & 6, Erie Tract;

Beginning at a point in the centerline of Middle Rd. at the southeast corner of land now owned by the General Tire & Rubber Co.;

Thence North 88° 40' 45" East, along the centerline of Middle Rd., 379.50 feet to a point in an angle therein;

Thence North 88° 09' 45" East, along the centerline of Middle Rd., 454.46 feet to a point in the westerly line of land now owned by The Cleveland Electric Illuminating Company;

Thence North 18° 27' 30" West, along the westerly line of The Cleveland Electric Illuminating Company land, 20.87 feet to an iron pin in the northerly line of Middle Rd.; thence in the same course, 1127.57 feet to an iron pin in a southeast corner of the General Tire & Rubber Co. Land.;

Thence South 87° 53" West, along a southerly line of the General Tire & Rubber Co. land, 95.80 feet to an iron pin in the lot line between Lots 5 & 6, Erie Tract;

Thence South 0° 16' East, along the lot line between Lots 5 & 6, Erie Tract, 142.50 feet to an iron pin monument;

Thence South 87° 14' West, along a southerly line of the General Rubber & Tire Co. land, 354.50 feet to an iron pin monument;

Thence South 0° 15' 45" West, along an easterly line of the General Tire & Rubber Co. land, 883.63 feet to an iron pin;

Thence North 89° 44' 15" West, along a southerly line of the General Tire & Rubber Co. land, 16.50 feet to an iron pin;

Thence South 0° 15' 40" West, along an easterly line of the General Tire & Rubber Co. land, 46 feet to an iron pin monument in the northerly line of Middle Rd.; thence in the same course, 20 feet to the place of beginning and containing 14.82 acres of land.

Subject to and together with all easements of record.

4. Vacant land fronting State Road
across from TiCl₄ Plant

Situated in the Township of Ashtabula, County of Ashtabula, State of Ohio and being part of the Holmes Tract;

Beginning at an iron pin in the Ashtabula City-Ashtabula Township Line at the northwest corner of land now owned by Reactive Metals Co.;

Thence North 0° 06' West, along the Ashtabula City-Ashtabula Township Line, 1270.77 feet to an iron pin in an angle therein;

Thence North 0° 43' West, along the Ashtabula City-Ashtabula Township Line, 993.25 feet to an iron pin in the southwest corner of land now owned by The Cleveland Electric Illuminating Company;

Thence North 89° 49' East, along the southerly line of The Cleveland Electric Illuminating Company, 1539.38 feet to an iron pin in the westerly line of State Rd.; thence in the same course, 30 feet to a point in the centerline of State Rd.;

Thence South 0° 29' 15" East, along the centerline of State Rd., 310.40 feet to a point in an angle therein;

Thence South 0° 03' 30" East, along the centerline of State Rd., 1105.17 feet to a point;

Thence South 71° 00' 00" West 31.72 feet to an iron pin in the westerly line of State Rd.; thence in the same course, 739.48 feet to an iron pin;

Thence South 0° 18' 30" East, 239.09 feet to an iron pin;

Thence South 89° 41' 30" West, 103.27 feet to an iron pin;

Thence South 3° 07' East, 358.84 feet to an iron pin;

Thence South 89° 40' West, along a northerly line of Reactive Metals Co., 746.79 feet to the place of beginning and containing 68.30 acres of land.

Subject to and together with all easements of record.

5) Provide copies of any and all documents pertaining to the use and ownership of any SCM facility or property in the Fields Brook water basin in Ashtabula County, Ohio, including, but not limited to, deeds, contracts, leases, subleases, purchase agreements and related correspondence.

Response:

SCM objects to this request, which is beyond the scope of 42 U.S.C. §§6927 and 9604. This request is overly broad and unnecessarily burdensome. SCM is producing herewith the following documents relative to SCM's purchase of Plant 1 from The Sherwin-Williams Company.

- a) October 11, 1974 Agreement of Sale (Document 509-44)
- b) June 5, 1975 Amendment to Agreement of Sale of October 11, 1974 (Document 545-49)
- c) October 11, 1974 Assumption Agreement (Document 550-52)

SCM is also producing herewith the following documents relative to SCM's purchase of Plant 2 from Gulf & Western Industries, Inc.

- a) July 15, 1983 Purchase Agreement (Document 553-608)
- b) Bill of Sale and Assumption of Liabilities (Document 609-12)

A variety of easements exist on the Plant 1 and Plant 2 property.

6) It is U.S. EPA's understanding that SCM acquired a TiO_2 and a TiCl_4 plant (now known as SCM-Plant 2) from Gulf & Western Natural Resources Group. These facilities were located

at State and Middle Roads in Ashtabula County, Ohio. Please provide the following information:

- a) the date of acquisition.
- b) the nature of the acquisition.
- c) the products produced at the facility before and after the acquisition.
- d) SCM's position regarding its assumption of liability for actions arising out of operations at the plant by Gulf & Western Natural Resources Group.
- e) all documents regarding the acquisition, including, but not limited to, contracts, deeds, leases, subleases, purchase agreements and correspondence.
- f) the plant's address.

Response:

- a) July 15, 1983
- b) Purchase of assets
- c) Titanium dioxide was produced at the TiO_2 plant by Gulf & Western before the acquisition and by SCM thereafter.

Titanium tetrachloride was produced at the TiCl_4 plant by Gulf & Western before the acquisition and by SCM thereafter.

The vacant land fronting Middle Road was formerly a farm. The farmhouse was used as a construction office during the construction of the TiO_2 plant. The farm buildings were torn down in the last 1970's. A gravel parking lot for contractors remains on the land.

The vacant land fronting State Road was formerly a golf course.

SCM did not assume liability for releases or threatened releases into the environment arising out of operation at the plant by Gulf & Western Industries, Inc., if any such liability exists.

e) See response to question No. 5.

f) See response to question No. 2.

7) Provide a list of all present and former plant managers, production managers and plant engineers at any of the above-described facilities. Please state the dates of their employment with SCM and G & W, positions held and last known address. Also, please indicate the numbered Requests regarding which they may have information.

Response:

ASHTABULA PLANT 1
PLANT MANAGERS

<u>NAME AND ADDRESS</u>	<u>EMPLOYMENT DATES</u>	<u>EMPLOYER</u>
George F. Wyman Non-Resonisve [REDACTED]	December 1, 1967 to November 30, 1973	Sherwin-Williams Company
Timothy C. Gillen Non-Resonisve [REDACTED]	October 1, 1973 to September 1, 1982	Sherwin-Williams Company & SCM Corp.
Frank Tyneski Non-Resonisve [REDACTED]	September 1, 1982 to Present	SCM Corp.

ASHTABULA PLANT 1
PRODUCTION MANAGERS

<u>NAME AND ADDRESS</u>	<u>EMPLOYMENT DATES</u>	<u>EMPLOYER</u>
William W. Shepherd Non-Resonisve [REDACTED]	August 1, 1969 to September 1, 1970	Sherwin-Williams Company
Timothy C. Gillen Non-Resonisve [REDACTED]	September 15, 1970 to September 30, 1973	Sherwin-Williams Company
Frank Tyneski Non-Resonisve [REDACTED]	October 1, 1973 to May 7, 1976	Sherwin-Williams Company & SCM Corp.
Edward M. Conneen, Deceased	August 26, 1976 to November 23, 1984	SCM Corp.
Augustus H. Benning Non-Resonisve [REDACTED]	June 1, 1985 to Present	SCM Corp.

ASHTABULA PLANT 1
MANAGER-MAINTENANCE & PROJECT ENGINEERING

<u>NAME AND ADDRESS</u>	<u>EMPLOYMENT DATES</u>	<u>EMPLOYER</u>
Frank W. Harris c/o Sherwin-Williams Company Non-Resonisve [REDACTED]	August 1, 1969 to May 1, 1973	Sherwin-Williams Company
Harry G. Grieselhuber Non-Resonisve [REDACTED]	June 15, 1973 to May 15, 1976	Sherwin-Williams Company
Frank Tyneski Non-Resonisve [REDACTED]	May 7, 1976 to August 31, 1982	SCM Corp.
Walter C. Flensburg Non-Resonisve [REDACTED]	September 1, 1982 to Present	SCM Corp.

ASHTABULA PLANT 2
PLANT MANAGERS

<u>Name</u>	<u>Dates of Employment</u>	<u>Other Positions Held</u>	<u>Address/Last Known Address</u>
Dr. Thomas H. Goodgame	1/15/63 - 2/22/64		Non-Resonisve
Denis E. O'Mulloy	4/1/64 - 3/1/65		
D. Brittain Briggs	3/15/61 - 9/?/65	Assistant Plant Manager	
Edward J. Holland	2/1/65 (7/1/44) - 8/69	Assistant Manager	
Irwin H. Hess	7/19/67 - 6/1/72	Tech. Dir.; VP & Gen. Mgr.; President	
Fred R. Mohrmann	5/8/63 - 7/13/77	Area Supv.; Prod. Mgr.; Prod. Supt.	
Douglas A. Towner	6/20/66 - present	Engr.; Group Leader; Tech. Mgr.-Titania; Prod. Supt.; Mgr. -Sp. Projects	

PRODUCTION MANAGERS - TiO₂

<u>Name</u>	<u>Dates of Employment</u>	<u>Other Positions Held</u>	<u>Address/Last Known Address</u>
Howard Weaver, Jr.	2/1/63 (12/6/43) - 2/1/72	Prod. Mgr.; Mgr. Proc. Dept.; Proc. Engr. Ch. Class; TiCl ₄ Mfg. Tech. Serv. Rep. Process Engr., TiCl ₄ Tech. Serv. Coordinator	Non-Resonisve
Albert R. Schell, Jr.	3/1/64 - 9/13/65	Pro. Engr.	
Fred R. Mohrmann	(see other listings)		
Douglas A. Towner	(see other listings)		
Ray E. Clark	8/3/64 - present	Shift. Supt.; Prod. Supt.; TiO ₂ Assist. Area Prod. Supt. Assist. Plant Supt.	
Robert L. Suttman	7/22/68 - present	Pro. Eng.; TiO ₂ Tech. Liaison; Area Prod. Supt. Tech. Coordinator Superv. Chem. Engr.; Acting TiO ₂ Superin- tendent; Tech. Supt.	
Ray E. Clark	(see other listings)		
Robert L. Lambert	10/1/80 (2/7/61) - present		

PRODUCTION MANAGERS - TiCl₄

<u>Name</u>	<u>Dates of Employment</u>	<u>Other Positions Held</u>	<u>Address/Last Known Address</u>
Fred R. Mohrmann	(see other listings)		
Michael G. Fowler	7/1/63 (8/29/60) - 4/1/71	Junior Engr.; Prod. Engr.; Area Process Engr.	Non-Resonisve
Ross A. Palmer	6/3/63 - present	TiO ₂ Prod. Shift Supv.; TiCl ₄ Prod. Supr.; Warehouse Foreman; QC/Ware- house/Shipping Foreman	
Lowell W. Johnson	4/1/64 - 7/31/68	TiO ₂ Prod. Engr.; Process Engr.; Sr. Process Engr.	
Michael G. Fowler	(see other listings)		
Barry G. O'Connell	1/2/68 - 6/30/77	TiCl ₄ Prod. Engr.	
Alfred C. Steinbronn	12/1/75 (6/26/61) - present	Operations Manager	
Rodney Shimko	9/12/77 - present	Chem. Engr. I; Sr. Process Engr.	

PLANT ENGINEERS

<u>Name</u>	<u>Dates of Employment</u>	<u>Other Positions Held</u>	<u>Address/Last Known Address</u>
Jack H. Thornton	2/1/63 - 6/30/64		Non-Resonisve
A. V. Dickey	6/1/65 (12/1/57) - 4/30/66	Maint. Supr.; Maint. Supt.	
John H. Nuber	5/1/63 - 5/6/66	Engr.; Assist. Ch. Engr.	
Donald R. Murray	1/20/64 - 10/23/70	Proj. Engr.; Sr. Proj. Engr.	
Joseph Romano	3/15/66 - 11/1/70		
John R. Wullschleger	4/20/65 - 2/29/68	M.E.; Gen. Foreman Maint. Supt.	
Paul J. Findlay	1/18/65 - 3/29/74	Engr.; Maint. Supt.	

Messrs. Steinbronn, Tyneski and Towner participated in the preparation of this response. As to the other persons named above, SCM objects to identifying the requests as to which they may have information, since this request calls for speculative information which is unreasonably burdensome and which beyond the scope of 62 U.S.C. §§ 6927 and 9604.

8) Provide the names of any predecessor or successor corporations or partnerships which owned or operated any SCM facility, as described above, in Ashtabula County, Ohio.

Response:

Former owners and operators of Plant 1 are:

Sherwin-Williams Company
101 Prospect Avenue
Cleveland, Ohio 44101

E.I. duPont De Nemours & Company
1007 Market Street
Wilmington, Delaware 19898

Former owners and/or operators of the Plant 2 TiO₂
plant are:

Gulf & Western Industries, Inc.
Gulf & Western Natural Resources Group
New Jersey Zinc Company
Jersey Titanium Company
Cabot Corporation
Cabot Titania, Inc.
Cabot Titania Company
Cabot Corporation (2/3) and
Ruberoid Corporation (1/3)

Former owners and/or operators of the Plant 2 TiCl₄
plant are:

Gulf & Western Industries, Inc.
Gulf & Western Natural Resources Group
New Jersey Zinc Company
Jersey Titanium Company
Cabot Corporation
Cabot Titania, Inc.
Cabot Titania Company
Cabot Corporation (2/3) and
Ruberoid Corporation (1/3)
RMI Company
U.S. Industrial Chemicals Co.
Mallory Sharon
Stauffer Chemical Company

9) On what date did SCM commence operations of its Glidden-Durkee Division facility at or near 2900 Middle Road, Ashtabula, Ohio.

Response:

SCM acquired Plant 1 on October 11, 1974 from The Sherwin-Williams Company.

10) Provide all knowledge or information you may have regarding contamination from your plant(s) entering Fields Brook, or a tributary thereof, either directly or indirectly.

Response:

At all times during SCM's ownership of Plants 1 and 2, NPDES permits have been in effect covering the wastewater discharges into Fields Brook from the wastewater collection and treatment facilities at Plants 1 and 2. In addition, prior owners of these plants also held permits for these discharges. Extensive information describing these discharges have been filed routinely by SCM and the prior owners of these plants with the EPA, Ohio EPA and their respective predecessor agencies. This information pertaining to both routine and non-routine discharges is contained in numerous permit applications, permits, self-monitoring reports, compliance inspection reports, effluent guideline sampling reports, other agency reports, correspondence and other documents. Because this information is extensive and should be contained in EPA's own files, SCM generally objects to the identification and submission of documents and information. If EPA no longer has copies of such documents or cannot otherwise obtain such documents from other sources, SCM will provide EPA with copies

of/or an opportunity to copy, any such documents which are specifically requested and are in SCM's possession. To assist EPA in evaluating the contents of its own files, SCM is voluntarily providing herewith copies of older documents relating to such discharges. See Documents 1-508, 640-1527, and 1561-1709 produced herewith. Also produced herewith are SCM reports of non-routine incidents involving releases that potentially could have reached the wastewater collection system, regardless of whether such releases did in fact reach such system. See Documents 1983-2017.

11) Provide all knowledge or information you may have regarding any property owned by you in Ashtabula County, Ohio, which may have been contaminated by prior owners or users. Your response should include, but not necessarily be limited to:

- a) names of prior owners or users.
- b) use of facility and property by prior owners or users.
- c) disposal practices of prior owners or users.
- d) volume and nature of sources of such contamination.

Response:

Prior owners of Plants 1 and 2 manufactured the same products at these plants as does SCM presently. These prior owners generated essentially the same wastes as does SCM. They also used the same waste management facilities which SCM now uses. These plants, including certain waste management facilities, were operating and contained wastes when they were acquired by SCM. See responses to questions 35 and 21 for a

description of waste management practices and facilities of prior owners.

SCM currently has not located any specific information regarding contamination of its real property by prior owners or users, except as follows:

1. PCBs were discovered in an overflow trench at the Plant 2 $TiCl_4$ plant in 1983. The trench was blocked off and contaminated soil was removed from the trench and the adjacent area. The Ohio EPA and EPA were aware of this situation at the time. Attached are Documents 2292-2319 which indicate Ohio EPA's and Gulf and Western's sampling efforts and which summarize the removal and disposal of the contaminated soil.

12) Provide all information you may have regarding any other sources of contamination to Fields Brook.

Response:

SCM objects to this question as being overly broad, unreasonably burdensome and calling for a speculative answer. SCM is aware of numerous publicly available studies and reports of potential sources of contamination with the Fields Brook watershed. Many of which were done by or for EPA or Ohio EPA. In preparing responses to this request, SCM came across Documents 2084-2247 which are being produced because they are older documents possibly not available to EPA presently. The following information is believed not to be reflected in such studies.

- a. Douglas Towner recalls receiving occasional reports that Plant 2 $TiCl_4$ plant personnel have observed tank trucks stopping at the State Road

bridge over Fields Brook at night and dumping the names of the personnel reporting this information or the dates when such information was received.

- b. Frank Tyneski recalls receiving occasional reports from Plant I personnel taking effluent samples that after heavy rains an oil sheen originating upstream of Plant I has been observed on Fields Brook and in the Conrail railroad track drainage trenches which empty into Fields Brook. He does not recall the names of these personnel or when these reports were received.

13) Provide the following information regarding any sewer lines (including storm, sanitary or combined sewers) or french drains which receive or have received runoff or discharges from the old G & W property (now known as SCM Plant 2) and the property located near 2900 Middle Road, in Ashtabula County, Ohio:

- a) The location and nature of each sewer line.
- b) Whether each sewer line is connected to the main trunk line.
- c) Does any sewer line have direct or indirect access to Fields Brook or a tributary thereof?

Response:

- 1. SCM Plant 1
 - a. The location of existing sewage lines are indicated on the drawings attached (Documents 1533-34):

<u>Number</u>	<u>Date</u>	<u>Description</u>
G 1002 7562-6-L15	2/20/80	Glaus Pyle and Schomer Sewer and Water Line Plan SCM Plant Layout

- b. The inactive barium and strontium carbonate process facilities were shut down by Sherwin Williams in 1972 and later dismantled. At this time, the locker room (Bldg. #6) sanitary fixtures were removed except for wash basins, and the sanitation facility was deactivated. See Drawing G1002. The outflow from the wash basins is tied into the 736 LF 91" x 58" storm sewer flowing north under Middle Road. All catch basins tie into the same storm sewer. The storm sewer picks up run off from south of the railroad tracks. All active plant sanitary fixtures are connected by underground laterals to the treatment plant. All process sewers and process area stormwater sewers lead to the north ditch which in turn leads to the wastewater treatment facilities.
- c. Sewer lines have indirect access to Fields Brook via the wastewater treatment facilities.

2. SCM Plant 2

The location of existing sewage lines and drainage are indicated on drawings (Documents 1534-1560 and 1954-1982):

<u>Number</u>	<u>Date</u>	<u>TiO₂ Plant</u>	
		<u>Description</u>	
E-4978-426	07/12/63	Lummus	Underground Piping: Settling Basin Area
E-4978-427		Lummus	Underground Piping: Water Treatment Area
E-4978-428	04/03/63	Lummus	Underground Piping: Boiler and CO Generation Area
E-4978-429		Lummus	Underground Piping: Cl ₂ Recovery, Feed Gas and Oxidation Area
E-4978-430		Lummus	Underground Piping: Wet Aftertreatment, Drying and Packing Areas
E-4978-431		Lummus	Underground Piping: Warehouse and RR Track Areas
E-4978-432		Lummus	Underground Piping: Shop and Electrical Substation Area
E-4978-433		Lummus	Underground Piping: Administration, Lab and Parking Areas
E-4978-434	03/29/63	Lummus	Underground Piping: Middle Road to Fields Brook
E-4978-148A	01/03/63	Lummus	Roads, Grading and Drainage
E-4978-710	06/05/63	Lummus	Finished Grading Plan
D-4978-701	05/15/62	Lummus	Grading Elevations
45-C-2013	07/15/64	Cabot	Sewers from H ₂ SO ₄ Scrubbing System

30-D-2012	04/13/66	Cabot	Underground Piping: Cooling Tower
80-D-2506	12/08/71	McKee	No. 5 Pond
80-D-2507	12/13/71	McKee	Storm Sump PA-473
80-D-2509	12/08/71	McKee	Storm Water Sumps at TiO ₂
80-D-2510	12/27/79	G+W	Drainage Trench - WAT Building
80-D-1505	02/19/72	NJZ	Waste Treatment System
80-D-1506	02/17/72	SCM	Waste Treatment System
30-D-2505	12/30/74	NJZ	Underground Piping: TiO ₂ Area
45-C-2507	07/12/79	G+W	FG-7 and Acid Trench
30-D-2507	05/13/80	G+W	Trench for Lime Pumps
45-D-2513	10/02/81	G+W	Area Trench System - Cl ₂ Recovery
60-D-2180	08/17/84	SCM	Underground Piping - Spray Dryer Area
90-D-2870	05/22/85	SCM	Underground Drainage Plan
45-D-2508			Trenches in Cl ₂ Recovery Area

TiCl₄ Plant

<u>Number</u>	<u>Date</u>		<u>Description</u>
3897-15-D-1501	10/06/71	Cabot	Plot Plan TiCl ₄ Area
10-D-2020	03/06/65	Cabot	Underground Piping: Sanitary and Storm Water
10-D-2036	06/06/66	SCM	Process Trench
10-D-2064	12/27/56	Stauffer	Sanitary Drainage System Details
15-D-2503	10/28/71	Cabot	East Pond
15-D-2504	10/28/71	Cabot	East Sump
15-D-2506	02/09/72	Cabot	North Sump
15-D-2508	02/14/71	Cabot	Trench for Effluent Treatment System

15-D-1501	01/31/72	NJZ	Waste Treatment System
10-D-2529	06/07/79	G+W	Process Trench
10-D-2564	02/23/64	G+W	Process Trench
10-D-2548	12/02/83	G+W	Process Trench
10-D-2552	01/13/84	G+W	Process Trench
10-D-2553	02/01/85	SCM	Process Trench
10-D-2102	06/15/84	SCM	Process Trench
10-D-2555	02/24/84	G+W	GA-510 Sump and Trenches
10-D-2556	02/28/84	G+W	GA-510 Sump and North Trench to Fields Brook
10-D-2566	04/24/84	G+W	Drainage Ditch at Waste Treatment Area
10-D-2568	07/24/84	G+W	North Gate Catch Basin
No Number			Sanitary and Storm Water Piping

- b. All sanitary sewer lines at the TiO_2 unit lead to the aerator and from there to the process wastewater treatment system at the $TiCl_4$ unit. All sanitary sewer lines at the $TiCl_4$ unit lead to a trickling filter and from there to the process wastewater treatment system.

All storm sewers at the TiO_2 unit lead to settling ponds. All storm sewers at the $TiCl_4$ unit lead to the process wastewater treatment system.

All process sewers at the TiO_2 unit are combined and pumped to the wastewater treatment system at the $TiCl_4$ unit. All process sewers at the $TiCl_4$ unit lead to the wastewater treatment system.

- c. Sewer lines have indirect access to Fields Brook via the wastewater treatment facilities.

14) Provide the following information regarding any drainage ditches which receive or have received runoff or discharges

from the SCM property located at 2900 Middle Road, in
Ashtabula, Ohio:

- a) The location of each drainage ditch.
- b) Whether runoff or discharge from each drainage ditch has direct or indirect access to Fields Brook or a tributary thereof.
- c) Any information regarding the presence, or potential for releases, of hazardous substances or constituents in the ditches.

Response:

- a. The location of existing drainage ditches at SCM Plant 1 are indicated on the attached drawings (Documents 1533-34):

<u>Number</u>	<u>Date</u>	<u>Description</u>
G1002	2/20/80	Glaus Pyle and Schomer Sewer and Water Plan
7562-6-L15		SCM Plant Layout
		- 4933N
		- 3674N
		- 4940N
		- 4490N (north ditch)
		- 4560N

- b. The facilities' main drainage ditch is the North Ditch located at 4490N. See Drawing 7562-6-L15 Run-off from the plant goes to the North Ditch where it is isolated and subsequently pumped via lift station into the process waste and water treatment system and finally discharged into a tributary of Fields Brook; Ditch 3674N. Via the South Ditch, flue pond process water is transferred to Ponds B & A, treated and recycled to the raw water treatment flocculator. This South Ditch will discharge to the Fields Brook only if hydraulic overload conditions occur.
- c. The SCM Spill Prevention Control and Countermeasure (SPCC) Plan, March 25, 1986, describes the potential for spills of hazardous substances and constituents in ditches and the structures and response actions to prevent contamination of the environment.

The SPCC plan is attached as Document 1533.

15) Provide the following information regarding any drainage ditches which receive or have received runoff or discharges from the old G & W property (which is now known as SCM plant 2) located at Middle and State Roads, Ashtabula, Ohio:

- a) The location of each drainage ditch.
- b) Whether runoff or discharge from any drainage ditch has direct or indirect access to Fields Brook or a tributary thereof.
- c) Any information regarding the presence of, or potential for, release of hazardous substances or constituents in the ditches.

Response:

- a. The location of existing drainage ditches at SCM Plant 2 are indicated on the drawings referenced in the response to Question 13.
- b. There is indirect access to Fields Brook via the wastewater treatment system.
- c. The SCM Spill Prevention Control and Countermeasure (SPCC) Plans describe the potential for spills of hazardous substances and constituents and the structures and response actions to prevent contamination of the environment. These SPCC plans are attached as Documents 2265-2291.

16) Does SCM have, or did SCM ever have, an NPDES permit for discharges to Fields Brook or a tributary thereto? Please identify any such permits.

Response:

Yes.

PLANT 1

<u>Permit No.</u>	<u>Effective Date</u>
31000013DD	9-28-84
310000523CD	11-20-78
E-313-BD	7-5-77
E-313-AD	2-6-74 (originally issued to Sherwin Williams)

PLANT 2

Permit No.Date Issued

31E00017CD

9-28-84

E-317-BD

10-4-78 (originally issued to G&W
Natural Resources Group)

17) Did Gulf & Western Natural Resources Group ever have an NPDES permit for discharges to Fields Brook or a tributary thereto? Please identify any such permits.

Response:

Yes.

PLANT 2

Permit No.Date Issued

31E00017CD

9-28-84

E-317-BD

10-4-78 (originally issued to G&W
Natural Resources Group)

18) Describe each manufacturing process that has been operated at all plants owned by SCM at its Ashtabula County, Ohio facilities. For each facility and process provide the years that the operations occurred and all the raw materials associated with or relating to the process.

Response:

PLANT 1

TIO₂ PROCESS DESCRIPTION

(FROM 1969 TO PRESENT)

Titanium dioxide pigment is manufactured in a three-step chloride process. The first involves the conversion of naturally occurring titanium compounds from rutile ore to

titanium tetrachloride by reacting the ore with chlorine in the presence of carbon at elevated temperatures. The titanium tetrachloride is cooled, condensed and purified.

Chlorinated waste solids from this step are concentrated in acidic water for disposal via a private contractor to an off-plant dumping site by means of rubberlined tank trucks. The exhaust gases from this step are stripped of acid forming compounds and any residual chlorine, with the acidic water being used to slurry the waste solids for off-plant disposition. The final exhausts are scrubbed with water which is neutralized and discharged to one of two settling ponds and finally into Fields Brook.

The second step covers the conversion of pure titanium tetrachloride by reacting it with hot oxygen. The chlorine released by this reaction is recirculated back to the process. There are no waste streams for disposal from this step.

The third step takes crude titanium dioxide formed by the oxidation step and processes it by conventional methods to achieve desired pigment properties. The titanium dioxide slurried in water is surface treated and is then filtered, washed, dried, ground and packaged.

The filtrates and wash water are collected in a large settling tank to recover any titanium dioxide present, and the overflow containing dissolved salts (NaSO_4 and NaCl) is neutralized and discharged to two settling ponds. Solids are settled out in these ponds, and a final control is made for pH to insure that all discharges conform to specific limits.

Raw Materials

1. Rutile Ore
2. Sulfuric Acid
3. Chlorine
4. Caustic Soda
5. Nitrogen
6. Oxygen
7. Carbon
8. By-Product HCl

BARIUM AND STRONTIUM PROCESS DESCRIPTION

Prior to SCM's ownership of Plant 1, Sherwin-Williams operated a barium and strontium manufacturing process. SCM did not operate this process.

Strontium or barium carbonate was essentially produced in the same process with changes in operating conditions of manufacturing equipment. Both were converted from ores, celestite for strontium carbonate and barytes for barium carbonate. In manufacturing, either celestite or barytes ore (blended with coke) was reduced in a kiln, then milled prior to a carbon dioxide precipitation-crystallization step. The strontium or barium carbonate product was then separated, washed, dried, screened and packaged.

Principal Raw Materials

1. Celestite Ore or Barytes Ore
2. Coke
3. Soda Ash

PLANT 2

TiO₂/TiCl₄ PROCESS DESCRIPTION

For the period from November 1983 through November 1984 the manufacturing processes were the same as those described in Request 19.

Since November 1984 there have been these changes (the basic process is still very similar):

- Cl₂ gas from the oxidation section is directly recycled to one chlorinator without a separate Cl₂ recovery step. Because of this less Cl₂ must be vaporized at the TiCl₄ plant.
2. Only about 30-40% of TiCl₄ produced is distilled twice.
 3. Some processing equipment at the TiCl₄ plant has more capacity and has some mechanical differences but the basic process and raw materials have not changed.
 4. The TiO₂ process does not require the use of purchased AlCl₃ and SiCl₄. CO is no longer produced. Toluene is used and so is hydrogen peroxide. AlCl₃ is produced from Al pellets.
 5. Because there is no Cl₂ recovery step the use of S₂Cl₂, Freon and paracymene has been discontinued. H₂SO₄ is not used for Cl₂ drying but is still used in surface treatment.
 6. A dispersant is used in high density TiO₂ slurries.

The present process is essentially the same as that at Ashtabula I.

19) Describe each manufacturing process that Gulf & Western Natural Resources Group operated at each of its Ashtabula County, Ohio facilities. For each process, provide the years

that the operations occurred and all the new raw materials associated with or relating to the process.

Response:

A description of the manufacturing processes is included in Document 613-32. Gulf & Western operated this process from 1972-1983. The process was the same before that. Document 633-39 contains a list of all raw materials and process aids.

20) Describe any hazardous substances that may have been contained in any by-product or wastes from each of the manufacturing processes described in Requests 18 and 19. Also, describe the amounts of waste, by-products or hazardous substances generated by each of such processes on a yearly basis.

Response:

Plant 1

The chlorinated wastes from the TiO_2 process are primarily acidic by nature. Approximately 45,000 tons of this waste are generated annually which contain approximately 17% HCl, 2000 PPM chromium and 30 PPM lead by weight.

The waste pile from the barium and strontium process is estimated to contain 50,000 YD^3 of material. See response to question 35 for additional information.

Plant 2

Prior to December 1984 solid waste from the waste treatment process was generated at a rate of approximately 250 $yd^3/10^6$ pounds of $TiCl_4$ production. One cubic yard weighs about one ton. On an annual basis this would be approximately 50,000 - 75,000 tons/year. This material is non-hazardous.

Since December 1984 the rate of waste generation has reduced to about 200 yd³/10⁶ pounds of TiCl₄ production or 40,000-60,000 tons/year.

Before December 1984 the Chlorine Recovery system utilized H₂SO₄ to remove water from gaseous chlorine. H₂SO₄ at 93% was put in the system and removed when H₂SO₄ concentration reached 87%. This H₂SO₄ was sold except in the coldest winter months when the freezing point of 87% H₂SO₄ becomes a problem. At those times it was shipped off-site for neutralization. This amounted to about 200 tons yearly.

Some TiO₂ is carried out of the process in waste water. This is pumped to the treatment unit and is included in the solid waste listed above.

21) Describe the storage, treatment and disposal practices for any by-product or wastes associated with each of the manufacturing processes described in response to Requests 18 and 19. This description should identify any use of drums, tanks, lagoons, ponds, waste piles, ditches, marshes, swamps, land treatment or disposal areas, public sewers, landfills, creeks, or waterways used or affected by such practices.

Response:

Plant 1

Process effluents from the TiO₂ operation are collected in acid brick trenches and the North Ditch and routed to a central neutralization basin. An agitator mixes these streams with sodium hydroxide to neutralize pH. The overflow from the mixing basin flows into two settling ponds (capacity 800,000 gallons each) arranged in series where the water is clarified by settling. The overflow from the settling ponds is into Fields Brook.

Waste solids from chlorination are concentrated in water and stored in two (2) brick-lined tanks (35,000 gallons capacity). Normally this waste is hauled off-site for treatment and disposal by a private contractor. Occasionally, this waste is taken to Plant #2 for treatment as process wastewater.

Based upon past records, Strontium and Barium Carbonate wash waters, filtrates and floor sump liquids were collected into a 10,000 gallon agitated tank. Lime, ferrous sulfate and Burtonite were added (as was required) to adjust acidity (pH) and insure the absence of Strontium or Barium and sulfide ions in solution. This tank overflowed to a second 10,000 gallon agitated tank where further adjustments were possible. This tank was emptied via a pump (operating on a level controller) to a series of retention and settling ponds. The total capacity of these ponds is estimated to be 1,200,000 gallons.

Additionally, barium containing wastes were disposed at the west end of 2900 Middle Road. See response to question 35 for additional information.

See Documents 1529-32 which describe wastewater treatment processes installed and operated by Sherwin Williams. Some additional information about these processes is included in some of the documents produced in response to question 10.

Plant 2

The primary waste constituents are metallic chlorides produced in the chlorination of titanium-bearing ores.

Metallic chlorides, unreacted ore and coke, and other inerts such as refractory materials are sluiced with water and sent through a four-stage neutralization process where the pH is adjusted with hydrated lime. The first three stages are tanks, the fourth is a concrete basin. Neutralized waste is pumped to a 185-ft. diameter thickener which holds about 2 million gallons of water.

Solids settle to a concentration of 6-10% and are pumped to four rotary vacuum filters where they are filtered out. Neutralized solids are then hauled off-site by truck. Solids level is 25-35%. Clarified water overflowing the thickener goes to ponds which provide some further settling time and then to Fields Brook.

Any process water from the TiO_2 plant is collected via a chemical sewer system which is routed to a sump and pumped to the $TiCl_4$ plant where it is combined with $TiCl_4$ plant wastes for treatment.

The TiO_2 plant has five settling ponds which are used for cooling water, storm water run-off, sump overflows, boiler blowdowns, etc.

Gulf + Western followed the same treatment practices generally as SCM. See Documents 1710-1953 and 2248-2263 which describe wastewater treatment processes installed and operated by Gulf + Western Cabot Corporation.

22) Describe the nature and state of any records and recordkeeping practices that have ever been maintained relating to any storage, treatment or disposal practices for any by-products or wastes associated with each manufacturing process described in response to Requests 18 and 19.

Response:

Plant 1

NPDES permit monthly monitoring reports prepared since 1974 have been retained.

Manufacturing personnel monitor the discharge from the process waste water settling ponds at 8-hour intervals reporting pH, flow and appearance. Also at eight-hour intervals, laboratory personnel analyze grab samples for suspended solids, pH and chlorine as a check at manhole "D" (settling pond discharge sample prior to final neutralization step). These records are kept for a minimum of 5 years.

Laboratory personnel analyze the chlorinated waste once every eight hours for percent solids. A monthly composite of the chlorinated waste is tested for specific gravity, G/L solids, ash, coke, TiO_2 , and HCL. The monthly chlorinated waste volumes have been kept on invoices which date back to 1974.

Since the effective date of the RCRA regulations, hazardous waste manifests have been issued with each load of chlorinated waste, and these manifests have been retained.

Annual hazardous waste reports are retained for several years. See Documents 2320-2344.

Every shipment of by-product HCL off plant site and internal transfer for in-process use are analyzed for percent HCL. Additionally, percent iron is determined for all in-process by-product HCL. These records are kept a minimum of five years.

Based upon available documentation, it appears that the strontium and barium carbonate plant operators and supervisors used to spot check effluent visually and with lead acetate paper every shift. Laboratory analyses were obtained weekly. The laboratory analyses for 1968 are the only remaining records. These analyses are attached as Documents 2022-2039.

Plant 2

Discharge permit monthly monitoring reports prepared since 1963 have been retained.

Strip charts recording flow and pH for wastewater streams for which continuous monitoring has been required are retained for at least three years.

Operating logs and data sheets for wastewater treatment operations are retained for at least three years.

Hazardous waste manifests for hazardous wastes sent off-site for disposal are retained for at least three years.

Annual hazardous waste reports are retained for several years. See Documents 2020-21 and 2040-83.

23) Describe each chemical reclamation process that SCM has operated in its Ashtabula County, Ohio facilities. For each facility and process state the years during which operation of the process occurred, the type of process equipment used, the types of chemicals associated with each reclamation process, the volume processed annually by each process, and the sources of the chemicals.

Response:

None

24) Describe the nature and state of any records and recordkeeping practices that have ever been maintained relating to the volume and kinds of chemicals received and processed as described in response to Request 23.

Response:

Not applicable

25) Describe the characteristics and the nature of wastes or by-products associated with each reclamation process. Such description should include any characteristic or listing that such waste would likely have under 40 CFR Part 261. The description should also include any hazardous substances the waste would likely contain.

Response:

Not applicable

26) Describe the nature and state of any records and recordkeeping practices that have ever been maintained relating to the characteristics and nature of the wastes or by-products described in response to Request 25.

Response:

Not applicable

27) Describe the practices and conditions relating to the storage of hazardous wastes or hazardous substances upon their arrival at each of SCM's Ashtabula County, Ohio facilities, until the time of their reclamation. Such a description should include, along with any dates when any significant changes occurred:

- a) what types of wastes were/are stored in drums.
- b) what types of wastes were/are stored in tanks.
- c) what types of containment systems for spills or releases were provided at the storage areas.
- d) the location of any storage areas.
- e) whether drums have been marked with the generator's or transporter's name.
- f) whether hazardous wastes from more than one source were ever mixed or commingled in a tank. How common was this practice? Did this include emptying drums into tanks?
- g) what was the practice regarding the cleanup of spilled materials from these stored hazardous wastes.
- h) did spills or releases (including those caused by fire) of these materials ever occur while they were awaiting processing.
- i) whether such wastes were ever stored in lagoons or ponds.

j) what types of such wastes were stored in lagoons or ponds.

k) what type of liner or any other impervious barrier did lagoons or ponds have to prevent the release of materials.

l) what types of wastes, if any, were ever stored in waste piles.

m) what records and recordkeeping practices have ever been maintained on storage and what is the state of those records?

Response:

Not applicable

28) Describe SCM's practices relating to the disposal and treatment of still bottoms, sludges and other non-reclaimed materials accumulated in any reclamation process itself.

Please include in such a description, along with the dates for different practices:

- a) whether the non-reclaimed materials were drummed up for disposal.
- b) if such non-reclaimed materials were drummed up, whether they were normally [or necessarily] put back in the drums of the seller from whom they originated.
- c) whether the non-reclaimed material was allowed to accumulate and was stored prior to treatment or disposal.
- d) the locations and types of storage areas used for storage of the non-reclaimed materials. Examples of types of storage areas could include drums, tanks, pits, waste pile ponds or lagoons.
- e) any containment systems utilized at these storage areas to help prevent releases of the stored material to the environment.

f) whether any spills or releases of these stored materials ever occurred. Approximately when.

where and how such materials were disposed.

what records and recordkeeping practices have ever been maintained in regard to the above practices. What is the state of those records?

Response:

Not applicable

29) Describe practices relating to any incineration processes used for disposal of wastes for each of SCM's Ashtabula County, Ohio facilities. This description should include:

- a) the location and years during which each incinerator operated.
- b) the rated capacity for each incinerator.
- c) the normal operating and peak temperature for each incinerator.
- d) the rated retention time for materials during the burn.
- e) the type of fuel used to bring the incinerator up to operating capacity.
- f) how the material was fed to the incinerator.
- g) what types of operating records were kept, including temperature and feed rate.
- h) the types of air pollution control devices that were installed on each incinerator and stack test results.
- i) whether any misting or raining from the incinerator stacks ever occurred.
- j) what quantities of incinerator ashes or sludges were generated from the incineration processes.
- k) what types of materials and volumes were burned in these incinerators.

thereof? If so, please state it, and include when such occurrences took place and who observed them.

Response:

No.

33) Have soil samples been collected and analyzed or monitoring wells ever been installed in or adjacent to the property to monitor for releases of pollutants or hazardous waste constituents? If so, please provide any data you have from such monitoring activities.

Response:

No.

34) Describe any location on SCM property located in the Fields Brook water basin at which wastes from SCM operations have been disposed. Please state the approximate time of disposal, the types of materials, their chemical characteristics and volumes involved. Also, provide any information you have regarding sample analyses that have been conducted of material in or adjacent to any other locations on SCM property in the Fields Brook water basin at which wastes from G & W operations have been disposed.

Response:

None

35) Describe the location and size of each lagoon, pond, waste pile, trench or pit that has existed on the SCM property and its purpose. For each lagoon, pond, waste pile, trench or pit describe:

- a) Any hazardous substances that may be or have been contained in them.
- b) The dates of each structure's existence and use.
- c) Any construction properties of each pit, pond, waste pile, trench or lagoon which would help prevent the release of materials from it.
- d) If not in use now, explain how it was closed or has been modified and the present use of the area.
- e) Any pictures, sketches or maps of these facilities.

Response:

Plant 1

Refer to the attached sketch, "Ashtabula Site Plot Plan," Document 1528, for a map showing the location of the below-listed facilities.

1. Pond. SCM believes that this pond was used by Sherwin-Williams in connection with its barium-strontium operations from 1968 to 1972 when it was closed. Its apparent function was to serve as a temporary holding basin for settling pond dredgings. Its contents have not been sampled. Its estimated size is 200,000 gallons. The manner of its construction and closure is unknown. The pond is located on the highly impermeable clay which exists throughout Plant 1.

2. Settling Pond. This pond was used by Sherwin-Williams for treating wastewater by sedimentation from

its barium-strontium operations from 1968 to 1972 when it was closed. Its capacity is estimated to be 100,000 gallons. It was constructed with an earthen berm and concrete cell dividers. The manner of its closure is unknown. The pond is located on the highly impermeable clay which exists throughout Plant 1. Its contents have not been sampled.

3. Waste Pile. This waste pile was used by Sherwin-Williams for the disposal of wastes from its barium-strontium operations during the period of those operations from 1968-1972. The method of closure is unknown. The method of construction is unknown; however, the pile is located on the highly impermeable clay which exists throughout Plant 1. Its size is estimated to be 50,000 cubic yards. Leachate tests were conducted by SCM on samples from the pile. SCM is unable to locate copies of those test results, except for barium which are listed on Document 2264.

4. North Holding Basin. This is a 4,000,000 gallon pond which is part of the plant's wastewater treatment facilities. It is used for retention of settling pond sediments and as an emergency retention pond for wastewater. It was constructed in 1972 and remains in use. The pond is located over the highly impermeable clay which exists throughout the plant. It has an 18-inch thick firm clay lining on the bottom and sides. The sides are also covered with crushed stone. Sampling data of the contents of this pond have been previously submitted to EPA and Ohio EPA.

5. Holding Basin. This 500,000 gallon pond was used in 1971 and 1972. Its use was the same as the north holding basin. It was excavated out of the highly impermeable clay which exists throughout the plant. It was closed by draining and filling with clay from adjacent areas. Sampling data of the contents of this pond have been previously submitted to EPA and Ohio EPA.

6 and 7. Settling Ponds. These two ponds, each with a capacity of 800,000 gallons, were constructed in 1968 and remain in use for wastewater treatment purposes. The ponds are located over the highly impermeable clay which exists throughout the plant. Each pond has an 18-inch thick firm clay lining on the bottom and sides. The sides are also covered with crushed stone. Sampling data of the contents of these ponds have been previously submitted to EPA and Ohio EPA.

8 and 9. Surge Ponds. These ponds were constructed in 1972 and continue in use to provide collection of raw water (ASHCO) treatment flocculator sediments. The west pond has a capacity of 20,000 gallons. The east pond has a capacity of 70,000 gallons. These bermed ponds were excavated from the highly impermeable clay which exists throughout the plant. They have been sampled but SCM is unable to locate copies of the analysis of those samples.

10. Waste Pile. Dust from the dust collectors on the chlorinator unit are temporarily stored in the southeast corner of the plant prior to off-site disposal. This storage pile was

first used for this purpose in 1969. This pile is located on the highly impermeable clay which exists throughout the plant. The size of the pile varies. The pile consists of ore or coke fines.

Plant 2

Listed below are the ponds, thickener and clarifier located at Plant 2. All ponds have been and are used for wastewater treatment purposes and are located in the highly impermeable clay which underlies Plant 2. Maps showing the location of those ponds are attached. See Document 1974-82.

TiO₂ Area

Pond 1	50' x 135' x 11' Deep	Built - 1963
Pond 2	50' x 135' x 11' Deep	Built - 1963
Pond 3	50' x 135' x 11' Deep	Built - 1963
Pond 4	50' x 135' x 11' Deep	Built - 1963
Pond 5	Northwest Pond 130 x 180 x 9' Deep	Built - 1972

TiCl₄ Area

North Pond	20' x 200' x 13' Deep	Built - 1957
South Pond	20' x 200' x 13' Deep	Built - 1957
Thickener (BG-119)	185 Ft. Diameter x 15' Deep	Built - 1972
East Pond	85' x 90' x 5 Ft. Deep	Built - 1972
Clarifier	22' x 106' x 10'9" Deep	Built - 1967

Sampling data of the contents of the above facilities have been previously submitted to EPA and Ohio EPA.

Sludge cake from the neutralization system at the Plant 2 $TiCl_4$ unit was placed in piles in the northeast portion of the $TiCl_4$ plant from 1972-77. These piles are located over the highly impermeable clay which exists throughout the plant. These piles are covered with vegetation. See Documents 2018-2019 and 2345-2813 for a description of the contents of these piles and for additional information.

Other drawings produced herewith also show one or more of the above-described facilities at Plants 1 and 2. SCM objects to producing all pictures, sketches and maps of such facilities because it is highly burdensome to locate and produce all such documents and because the documents produced herewith show the location of these facilities.

For additional information regarding the construction and use of wastewater treatment facilities, see the Documents produced in response to question 21.

36) Provide the name of each customer from who SCM has received hazardous substances for purposes of treatment or disposal, including incineration or reclamation. Further, provide any information you have on the kind of waste received, the quantity of each kind of waste received, the processes used by SCM in handling these wastes, the period during which each kind of waste was received and processed and the likely disposition of any residues from that process.

Response:

Not applicable

37) Provide copies of any documents that you now have that contain information indicating the receipt of hazardous wastes for reclamation, incineration, or other treatment by SCM. Such documents would include logs, invoices, bills of lading, purchase orders, work orders, trucking records, correspondence, contracts or other agreements.

Response:

Not applicable

38) Provide the names of all other off-site facilities that have been used by SCM for the disposal of unreclaimed chemical wastes and hazardous wastes, incineration process wastes and manufacturing process wastes. Provide the dates during which such disposal has occurred and the kinds of wastes sent to each facility.

Response:

SCM has not used any off-site facilities located within the Fields Brook watershed for disposal of its wastes. Therefore, this question is irrelevant to the subject matter of this request.

39) Provide any information you have regarding the waste disposal methods utilized by any surrounding property owners or users.

Response:

40) Describe any information SCM may have obtained regarding contaminated fill material or debris deposited in or near Fields Brook or its tributaries. Such should include any information regarding fill allegedly disposed by Brenkus Excavating at or near the residence of Sandra Herl, 935 East 19th Street, Ashtabula, Ohio.

Response:

None

41) A list and description of all liability insurance coverage that is or was carried by you or any predecessor or successor corporations or partnerships, including any self-insurance provisions, that relates to hazardous substances and/or the above-referenced sites. Provide copies of all of these insurance policies.

Response:

SCM objects to this question which is outside the scope of 42 U.S.C. §§ 6927 and 9604.

42) Provide any information that you have concerning the disposal of hazardous substances from operations at Reserve Environmental Services, Inc. including:

- a) description of the method of operations at the site (e.g. how drums were rinsed, materials used in drum cleaning, methods of disposal of waste residues from drums, disposal of rinse water, etc.)
- b) the disposal locations used by Reserve Environmental Services for residues, rinse water

and solid wastes generated by their operations. This description should include locations both on and off their properties.

the disposal locations for any drums discarded by the company.


- d) the estimated quantity of drums and waste residue disposed of at each location by the company.
- e) whether the company received drums from persons other than SCM for cleaning.

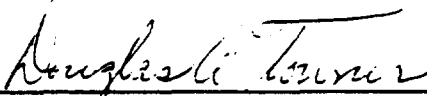
Response:

See response to question 30.


September 12, 1986

SCM CORPORATION


Frank Tyneski
Plant Manager
Ashtabula Plant 1


Douglas A. Towner
Plant Manager
Ashtabula Plant 2

As to objections:


Ronald R. Janke
Attorney for SCM Corporation

STATE OF OHIO
COUNTY OF ASHTABULA

Douglas A. Towner, being first duly sworn, states that he is an authorized agent of SCM Corporation, that while he does not have personal knowledge of all the facts recited in the foregoing response, information contained herein with respect to Ashtabula Plant 2 has been collected, based upon discussions with knowledgeable SCM personnel and upon a search by SCM employees of those files of SCM Corporation, located in Ashtabula, Ohio, which were believed to have contained responsive information, and is true to the best of his knowledge and belief.

Douglas A. Towner
Douglas A. Towner

Sworn to and subscribed before me this 11th day
of September, 1986.

Kathleen A. Rinto

Notary Public

KATHLEEN A. RINTO
Notary Public for the State of Ohio
My Commission Expires March 2, 1989

MEMORANDUM

Bethlehem, Pa.
April 25, 1980

TO: P. L. Kern

FROM: D. W. Bacon

SUBJECT: CHROMIUM LEACHING FROM NEUTRALIZED ASHTABULA
SPRAY QUENCHER SOLIDS

Introduction

Previous results from Envirolab, Inc., indicated that leachate chromium levels from neutralized sludge were above the EPA limit of 0.50 ppm. These results are summarized in Table 1.

TABLE 1

Sample #	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Cr (mg/l)	2.6	1.1	1.1	0.60	1.7
Cr ⁺⁶ (mg/l)	2.8	1.0	0.6	0.24	0.16

NOTE: Sample #5 was a fresh composite of 23 samples. The leachates from all samples were checked for Cr⁺⁶. The results indicate that all or nearly all the leachable Cr is Cr⁺⁶ in aged samples 1-4 and very little of the total Cr is Cr⁺⁶ in the fresh sample.

For this reason Ashtabula requested that we explore methods for "fixing" the chromium. Ashtabula sent us some fresh sludge along with the EPA approved leach procedure. We decided to attack the problem in two phases:

- First, try to duplicate the previous leach results.
- Second, if chromium leachate levels are confirmed to be above the EPA limit, try to develop a method for fixing the chromium.

cc Files

H.C. Peterson

D.A. Towner

A.C. Steinbronn ✓

F.A. Olson

SCM 002571

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
01-19-79	Unknown	Unknown/Open Pump	Saybrook	N
02-18-79	IMC Chemical Co.	100000 Gallons/Waste Water	Lake Erie	Y
02-17-79	Edgewood Trailer Park	1500 Gallons/Kerosene	Ashtabula River	Y
02-26-79	Amoco Oil Co.	10 Gallons/Oil Sludge (Recovered 9 Gallons)	Rock Creek	N
03-05-79	Intl. Minerals & Chemicals	300 Gallons/Diesel Fuel	Lake Erie	Y
03-07-79	IMC Chemical Co.	125 Gallons/Hydrochloric Acid	Lake Erie	Y
03-19-79	IMC Chemical Co.	Unknown/Hypochlorite	Fields Brook	Y
03-19-79	SCM Corp. Glidden Div.	Unknown/Dye	Corner of State and Middle Road	Y
03-19-79	Union Card	Unknown/Iron	Lake Erie	Y
03-18-79	National Petroleum	1050 Gallons/Crude Oil (Recovered 1050 Gallons)	Mill Creek	N
03-16-79	Gulf Oil Co.	Unknown/Gasoline	Ashtabula	Unknown
04-10-79	Universal Cleaning Co.	Unknown/Liquid Titanium Dioxide and Vancide	Ashtabula	Unknown
04-12-79	Bill Krouse	500 Gallons/Crude Oil	Rock Creek	N
04-17-79	Liquid Carbonic Corp.	Unknown/Liquid Carbon Dioxide	Conneaut	N

National Response Center Data re
Chemical Spills in Ashtabula County

<u>Bates No.</u>	<u>Date</u>	<u>Spiller</u>	<u>Type/Quantity of Material</u>	<u>Location</u>	<u>Fields Brook (Y/N)</u>
00003	05/06/88	Chemical Leaman Tank Lines	Diescl/Unknown	Route 11, South of Route 307, near Jefferson	N
00007	06/01/88	Matlack	Resin Solution/70 Gallons	Iten Co. Industries 4001 Benefit Avenue	N
00011	01/15/87	SCM Chemical	Titanium Tetrachlo- ride/10 lbs.	Corner of State Road and Middle Road Plant	Y
00013	01/17/88	Matlack	Gasoline/10 Gallons	1818 Prospect Road	N
00015	04/07/87	SCM Chemical	Titanium Tetrachlo- ride/10 lbs	Corner of State Road and Middle Road Plant	Y
00017	04/09/87	SCM Chemical	Titanium Tetrachlo- ride/10 lbs	Corner of State Road and Middle Road	Y
00019	02/06/87	East Ohio Gas Co.	Natural Gas/Unknown	Tall Trees Drive and Forest St.	N
00021	06/05/87	SCM Chemical	Titanium Tetrachlo- ride/50 lbs	Corner of State Road and Middle Road Plant	Y

— NATIONAL RESPONSE CENTER —
INFORMATION

<u>Bates No.</u>	<u>Date</u>	<u>Spiller</u>	<u>Type/Quantity of Material</u>	<u>Location</u>	<u>Fields Brook (Y/N)</u>
00023- 00024	06/19/87	Emro Marketing Gastown Division	Diescl/25 Gallons	5569 Route 193	N
00025- 00026	06/26/87	Elkem Metals Co.	Kerosene/100 Gallons	East On Lake Road	N
00027- 00028	06/28/87	SCM Chemical	Titanium/75 lbs.	Corner of State Road and Middle Road Plant	Y
00029- 00030	08/12/87	SCM Chemical	Chlorine Gas/40 lbs.	Corner of State Road and Middle Road Plant	Y
00035- 00036	09/04/87	SCM Chemical	Chlorine Gas/50 lbs	Corner of State Road and Middle Road Plant	Y
00037- 00038	04/09/87	SCM Chemical	Titanium Tetrachlo- ride/20 lbs.	Corner of State Road and Middle Road Plant	Y
00039- 00040	12/10/87	Matlack	Crude Oil/100 Gallons	Quaker State Co. Route 322 and State Route 11	N
00088	03/13/87	Unknown	Gasoline/Unknown	Standard Oil--Lake Ave. & W. 9th St.	N
00092	03/14/86	Union Carbide	Lube Oil/Est. 30 Gallons	Lake Road	N
00148- 00149	06/25/86	Unknown	Unknown/Unknown	House on Plymouth Ridge Road	N

NATIONAL RESPONSE CENTER
INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
09-08-78	True Temper Co.	2100 Gallons/Sodium Hydroxide	Cowles Creek	N
09-12-78	Glidden Pigments	50 Gallons/Titanium Tetrachloride	Ashtabula	Unknown
09-20-78	Unknown	Unknown/Greenish Oily Substance	Grand River	N
09-25-78	East Oil Gas Co.	Unknown/Brine	Wheelers Creek	N
09-27-78	IMC Chemical Co.	Unknown/Chlorine (Gas)	3509 Middle Road	Y
09-28-78	IMC Chemical Co.	Unknown/Sulfuric Acid	Lake Erie	Y
10-02-78	Bessemer & Lake Erie Railroad	Unknown/Red Paint	Conneaut Creek	N
10-07-78	IMC Chemical Co.	Unknown/Chlorine	3509 Middle Road	Y
10-16-78	IMC Chemical Co.	50 Gallons/Sulfuric Acid	Lake Erie	Y
10-19-78	Greenleaf Motor Express Inc.	Unknown/Caustic Soda & Acids	Ashtabula	Unknown
10-24-78	Rockwell Int/ Brake Div.	2 Gallons/Water Soluable Pigment-Red Oxide	Red Brook Creek	N
10-18-78	Olin Corp.	Unknown/Waste Water	Fields Brook Middle Road	Y
11-02-78	Unknown	Unknown/Car Batteries	Ashtabula	Unknown
11-06-78	Gulf & Western	75 lbs/Chlorine (Gas)	Corner of State and Middle Road	Y
11-30-78	SCM Corp./ Glidden Div.	Unknown/Titanium Chloride	Corner of State and Middle Road	Y

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
05-23-83	Rockwell Int/ Brake Div.	Unknown/Fuel Oil Unknown/PCB Oil	Lake Erie	Y
05-26-83	Cleveland Electric Illuminating	Unknown/Black Smoke	Lake Road	N
05-26-83	Locke Machine Co.	Unknown/Fuel Oil	Andover	N
05-27-83	Iten Fibers	Unknown/Chemical Odors	4001 Benefit Ave.	N
06-03-83	Gas Oil Co.	Unknown/Crude Oil Unknown/Brine	Lennox	N
06-07-83	Rock Creek City of	Unknown/Cravel	Rock Creek	N
06-09-83	White Oil Co.	Unknown/Crude Oil	Private Pond- Cherry Valley	N
06-11-83	Gulf & Western	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
06-12-83	Gulf & Western	25 Gallons/Titanium Tetrachloride	Corner of State and Middle Road	Y
06-13-83	Farmer	8 lbs/Atrazine 10 lbs/Metolachlor	Unnamed Creek-Andover	N
06-23-83	Unknown	Unknown/Brine	Mosquito Creek	N
06-29-83	Gulf & Western	Unknown/Fly Ash	Corner of State and Middle Road	Y
07-01-83	SCM/Pigments Div.	1 Gallon/PCB Oil (1 Gallon Recovered)	Corner of State and Middle Road	Y
07-05-83	Northway Environmental	Unknown/Waste Oil	Geneva	N
07-19-83	Gas Search, Inc.	Unknown/Brine & Drilling Mud	Cherry Valley	N

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
10-31-83	Gulf & Western	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
11-14-83	SCM/Pigments Div.	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
11-15-83	Mr. H.C. Gabler	80 Gallons/Fuel Oil	Ashtabula River	Y
11-16-83	Pittsburg & Conneaut Dock	924000 Gallons/Leachate	Lake Erie	Y
11-17-83	SCM/Pigments Div.	Unknown/Dust	Corner of State and Middle Road	Y
11-22-83	Convenient Food Store	Unknown/Gasoline	Andover	N
11-26-83	Greenleaf Motor Freight Co.	Unknown/Titanium Tetrachloride	Ashtabula River	Y
11-29-83	Pittsburg & Conneaut Dock	194460 Gallons/Coal Pile Runoff	Conneaut Creek	N
11-30-83	SCM/Pigments Div.	320 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
12-06-83	Pittsburgh & Conneaut Dock	431020 Gallons/Coal Pile Runoff	Conneaut Creek	N
12-07-83	Rock Creek Post Office	Unknown/Mercury	Rock Creek	N
12-12-83	Pittsburgh & Conneaut Dock	Unknown/Coal Pile	Lake Erie	Y
12-16-83	SCM/Pigments Div.	Unknown/Fly Ash	Corner of State and Middle Road	Y

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
12-16-83	Ashland Petroleum	600 Gallons/Gasoline	Conneaut	N
12-19-83	SCM/Pigments Div.	30 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
12-22-83	SCM/Pigments Div.	30 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
12-28-83	Morrison Plastic Plant	Unknown/Overflow From Sewer	Ashtabula	Unknown
01-16-84	Unknown	Unknown/Particulate	Ashtabula	Unknown
02-01-84	SCM/Pigments Division	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
02-06-84	SCM/Pigments Division	Unknown/Sulfur Chloride	Corner of State and Middle Road	Y
02-07-84	Jack Fairborn	Unknown/Brine	Kingsville	N
02-11-84	Gas Oil Co.	Unknown/Brine	Unnamed Creek-Morgan	N
02-12-84	Pittsburgh & Conneaut Dock	Unknown/Runoff Water	Conneaut Creek	N
02-13-84	D&C Trailer Park	Unknown/Fuel Oil	Unnamed Creek- Jefferson	N
02-14-84	General Tire & Rubber	Unknown/Waste Water	Fields Brook	Y
03-05-84	SCM/Pigments Division	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
03-19-84	SCM/Pigments Division	480 lbs/Sulfur Chloride Unknown/Fly Ash	Corner of State and Middle Road	Y

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
03-19-84	SCM/Pigments Division	Unknown/Exhaust Gas Unknown/Fly Ash	Corner of State and Middle Road	Y
03-27-84	Roller Reinforced	50 Gallons/PCB Oil	1108 W. 5th	N
03-26-84	Heist Corp.	Unknown/Waste Oil Unknown/Waste Chemicals	3140 State Rd.	Y
03-28-84	Cochran Oil Co.	Unknown/Sour Mash	Grand River	N
03-31-84	Lyden Oil Co./ Amaco	Unknown/Fuel Oil	Saybrook	N
04-02-84	General Electric	30 Gallons/Nitric Acid Unknown/Sulfuric Acid	Conneau.	N
04-05-84	Warren Kiel	1 Gallon/Crude Oil	Jefferson	N
04-06-84	SCM/Pigments Div.	240 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
04-07-84	Piggsburgh & Conneaut Dock	Unknown/Coal	Conneaut Creek	N
04-13-84	Gulf Oil	100 Gallons/Gasoline	Ashtabula	Unknown
04-17-84	Greenleaf	Unknown/Possible Oil	Ashtabula River	Y
04-18-84	White Foods, Inc.	75 Gallons/Diesel	Lake Erie	Y
04-25-84	Iten Fiber Co.	Unknown/Smoke Unknown/Odors	Ashtabula	Unknown
04-28-84	SCM/Pigments Div.	30 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
05-01-84	SCM/Pigments Div.	240 lbs/Sulfur Chloride	Corner of State and Middle Road	Y

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
05-03-84	SCM/Pigments Div.	Unknown/Fly Ash	Corner of State and Middle Road	Y
05-03-84	Unknown	Unknown/Hazardous Waste	Unknown	Unknown
05-07-84	Cochran Oil Co.	Unknown/Sour Mash Unknown/Ethyl Alcohol	Mill Creek	N
05-14-84	Mark Resources Corp.	Unknown/Crude Oil	Kingsville	N
05-20-84	SCM/Pigments Div.	Unknown/Sulphur Chloride	Corner of State and Middle Road	Y
05-28-84	Cochran Oil Co.	Unknown/Sour Mash	Mill Creek	N
05-29-84	SCM/Pigments Div.	Unknown/Sulphur Chloride	Corner of State and Middle Road	Y
05-31-84	SCM/Pigments Div.	920 lbs/Chlorides	Corner of State and Middle Road	Y
06-01-84	SCM/Pigments Div.	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
06-02-84	SCM/Pigments Div.	720 lbs/Chlorine (Gas)	Corner of State and Middle Road	Y
06-05-84	Unknown	Unknown/Fuel Oil	Ashtabula River	Y
06-08-84	Conrail	200 Gallons/Fuel Oil	Fields Creek	Y
06-08-84	A&B Dock Co.	Unknown/Methane	Ashtabula	Unknown
06-08-84	SCM/Pigments Div.	420 lbs/Sulfur Dioxide 300 lbs/Chlorine (Gas)	Corner of State and Middle Road	Y
06-15-84	Matlack	900 Gallons/Gasoline	Unnamed Creek- Austinburg	N

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
06-21-84	Frenches, Inc.	Unknown/Cement	Pymatuning	N
06-22-84	Talcott Trucking	Unknown/Brine	Jefferson	N
06-25-84	SCM/Pigments Div.	12 Gallons/Chlorine (Gas)	Corner of State and Middle Road	Y
07-03-84	Willard Construction	Unknown/Burning Brush	Willard	N
07-03-84	Slater Lease	Unknown/Brine Unknown/Crude Oil	Pymatuning	N
07-03-84	SCM/Pigments Div.	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
07-10-84	Dorset Oil Co.	Unknown/Crude Oil Unknown/Brine	Dorset	N
07-10-84	Cochran Oil Co.	Unknown/Sour Mash	Jefferson	N
07-10-84	Pittsburgh & Conneaut Dock	Unknown/Waste Water	Conneaut Creek	N
07-19-84	Unknown	6 DMS/Waste Chemicals	Hartsgrove	N
07-19-84	SCM/Pigments Div.	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y
07-20-84	Cochran Oil Co.	Unknown/Sour Mash Unknown/Ethyl Alcohol Wastes	3 Brothers Creek	N
07-23-84	Envirogas, Inc.	Unknown Water	Unnamed Creek- Austinburg	N
07-27-84	Park Ohio Industries	Unknown/Brine	Holbrook	N

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
08-01-84	City of Orwell	20 lbs/Mercury	Orwell	N
08-04-84	Wings Construction	Unknown/Garbage	Ashtabula River	Y
08-08-84	RMI Co.	200 DMS/Titanium	State Road	Y
08-09-84	Cleveland Electric Illuminating	Unknown/Steam	Lake Road	N
08-10-84	Wings Construction	Unknown/Bad Water	Sheffield	N
08-13-84	Clinton Oil Co.	Unknown/Natural Gas	Geneva	N
08-20-84	Unknown	Unknown/Brine	Austinburg	N
08-23-84	Ryder Pie, Inc.	50 Gallons/Orthophthaloyl/ Chloride	Ashtabula	Unknown
08-24-84	SCM/Pigments Div.	720 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
08-30-84	SCM/Pigments Div.	150 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
08-31-84	Rock Creek Aluminum Co.	10 lbs/Aluminum Dross	Rock Creek	N
08-31-84	SCM/Pigments Div.	240 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
09-05-84	Cleveland Electric Illuminating	300 Gallons/Waste Water	Lake Erie	Y
09-09-84	Bill Kraus	Unknown/Smoke	Rock Creek	N
09-12-84	Unknown	Unknown/Brine 42 Gallons/Crude Oil	Wayne	N

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
09-17-84	Exploration Management	Unknown/Crude Oil Unknown/Brine	Wayne	N
10-05-84	Unknown	Unknown/Brine	Unnamed Creek-Windsor	N
10-15-84	Unknown	Unknown/Oil Unknown/Sewage	Pymatuning	N
10-15-84	E. Heldey Co.	Unknown/Waste Chemical	Kingsville	N
10-16-84	Unknown	Unknown/Brine Chemicals Unknown/Pesticides	Ashtabula	Unknown
10-30-84	Coca Cola Co.	Unknown/Waste Water Unknown/Fish Kill	Wheel Creek	N
10-30-84	SCM/Pigments Div.	240 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
11-05-84	Rockwell Int/ Brake Div.	Unknown/Waste Oil	Saybrook	N
11-06-84	Mother Nature	Unknown/Bacteria	Geneva	N
11-16-84	SCM Corp/Plant #2	120 lbs/Sulfur Chloride	Corner of State and Middle Road	Y
11-17-84	Cleveland Electric Illuminating	15 Gallons/10c Mineral	Ashtabula	Unknown
11-28-84	Unknown	Unknown/Natural Gas	Geneva	N
11-30-84	Cleveland Electric Illuminating	150 Gallons/PCB Oil	Conneaut	N
11-30-84	Junkyard	7 ITM/Transformer Unknown/Capacitors Unknown/Waste Chemicals	Conneaut	N

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
12-02-84	Goss Oil Co.	50 Gallons/Fuel Oil	Ashtabula	Unknown
12-10-84	Sunray	15 Gallons/Formaldehyde	Ashtabula	Unknown
12-21-84	Unknown	Unknown/Oil	Lake Erie	Y
12-29-84	Pittsburgh & Conneaut Dock	Unknown/Rain Runoff	Conneaut Creek	N
01-01-85	Geneva Stp.	Unknown/Sewage	Cowles Creek	N
01-25-85	Standard Oil Co.	500 Gallons/Gasoline	Ashtabula	Unknown
01-30-85	Environmental Management Corp.	2 Gallons/PCB Oil	Conneaut	N
02-06-85	Harry Bump	Unknown/Smoke	Denmark	N
02-13-85	Unknown	Unknown/Mercury	Conneaut	N
02-19-85	SCM/Pigments Div.	55 Gallons/Titanium Tetrachloride	Corner of State and Middle Road	Y
02-22-85	Pittsburgh & Conneaut Dock	Unknown/Leachate	Conneaut Creek	N
02-25-85	Springwood Products	Unknown/Fuel Oil Unknown/Dead Birds	Cowles Creek	N
02-13-85	Neal Maenta	1 lb/Lube Oil	Rome	N
03-04-85	Pittsburgh & Conneaut Dock	Unknown/Leachate	Conneaut Creek	N
03-06-85	Eighmey Corp.	Unknown/Cutting Oil	Conneaut	N
03-12-85	Standard Oil Co.	Unknown/Fuel Oil	Storm Sewer-Geneva	N

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
08-05-85	RMI Sodium Plant	500 lbs/Chlorine (Gas)	Fields Brook	Y
03-10-85	Koski Construction	Unknown/Fly Ash Unknown/Smoke	4830 Middle Road	Y
08-20-85	Smith & Wesson Co.	Unknown/Unknown	Rock Creek	N
08-20-85	Advanced Technology	930 Gallons/Hydrochloric Acid 5%	Storm Sewer - Ashtabula	Unknown
08-21-85	Premex Corp.	5 Gallons/Toluene Diisocyanate	Geneva	N
08-21-85	Mother Nature	Unknown/Methane Unknown/Brine	Austin rg	N
08-23-85	Consolidated Freight	4 Gallons/Adhesive Compound	Conneaut	N
08-26-85	Unknown	Unknown/Unknown	Ashtabula River	Y
09-06-85	Plasticolors, Inc.	7 Gallons/Lead Chromate	3129 Middle Road	Y
09-14-85	Everflow Eastern Co.	Unknown/Natural Gas	Trumbull	N
09-16-85	Ashtabula Stp.	Unknown/Odor	Ashtabula	Unknown
09-19-85	Mother Nature	Unknown/Algae	Grand River	N
09-22-85	SCM/Pigments Div.	2500 Gallons/Titanium Oxide 1%	Corner of State and Middle Road	Y
09-23-85	SCM/Pigments Div.	300 Gallons/Titanium Tetrachloride (300 Gallons Recovered)	Corner of State and Middle Road	Y
09-23-85	SCM/Pigments Div.	Unknown/Chlorine (Gas)	Corner of State and Middle Road	Y

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
05-08-86	Headly Painting & Sandblasting	Unknown/Solvent Unknown/Paint	Kingsville	N
05-09-86	Parker-Mannifin Co.	300 Gallons/Cutting Oil (200 Gallons Recovered)	Sanitary Sewer - Andover	N
05-11-86	SCM/Pigments Div.	Unknown/Soot Unknown/Smoke	Corner of State and Middle Road	Y
05-12-86	Conrail	500 Gallons/Diesel Fuel	Ashtabula	Unknown
05-21-86	B&B Precision Tool Co.	Unknown/Gasoline	Ashtabula River	Y
06-03-86	Big M's Truck Stop	5000 HM/Tires Unknown/Smoke	Kingsville	N
06-03-86	Pittsburgh & Conneaut Dock	200 Gallons/PCB Oil	Conneaut	N
06-05-86	Cowins Trucking	Unknown/Brine	Unnamed Creek - Colebrook	N
06-05-86	Smith-Corona Metals/#2	50 lbs/Titanium Tetrachloride	Ashtabula	Unknown
06-07-86	Unknown	Unknown/Odor	Ashtabula	Unknown
06-11-86	Pittsburgh & Conneaut Dock	Unknown/Coal Leachate	Conneaut Creek	N
06-10-86	Ashtabula Stp.	Unknown/Sewage	Ashtabula	Unknown
06-11-86	Unknown	Unknown/Crude Oil	Mill Creek	N
06-16-86	Bob Mottas Body Frame Shop	Unknown/Oil Unknown/Junk	Fields Brook	Y

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
10-18-86	Conrail	1000 Gallons/Diesel Fuel	Geneva	N
10-18-86	Sohio Chemical Co.	100 Gallons/Diesel Fuel	Lima	N
10-22-86	John Regala Chevrolet	50 Gallons/Hydraulic Oil	Pymatuning	N
11-03-86	Amoco Oil Co.	Unknown/Waste Oil	Roaming Rock Lake	N
11-06-86	Parmco Ind.	55 Gallons/Naptha Unknown/Oil	Jefferson	N
11-08-86	Sines & Sons, Inc.	Unknown/Gasoline	Sanitar Sewer - Geneva	N
11-23-86	Ashtabula Recreation	Unknown/Dredge Spoil Unknown/PCB Contamination	Ashtabula River	Y
12-02-86	Pittsburgh & Conneaut Dock	Unknown/Leachate	Conneaut Creek	N
12-08-86	Wesbetos	Unknown/Asbestos	Ashtabula	Unknown
12-17-86	Jefferson Schools	40 Gallons/Diesel Fuel	Jefferson	N
12-17-86	Restaurant Food & Supply Co.	100 Gallons/Diesel Fuel	Lake Erie	Y
12-15-86	LCP, Inc.	3 lbs/Potassium Hydroxide	Lake Erie	Y
01-05-87	Iten Industries	Unknown/Rubber Waste Unknown/Polyester Resin Unknown/Epoxy Resin Unknown/Phenolic Resins	4001 Benefit Ave.	N
01-15-87	SCM/Pigments Div.	10 lbs/Titanium Tetrachloride	Corner of State and Middle Road	Y
01-15-87	Mobil Oil Co.	Unknown/Gasoline	Austinburg	N

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Broo N/Y</u>
01-16-87	Matlack Trucking, Inc.	10 Gallons/Gasoline	Ashtabula	Unknown
01-13-86	Mrs. John Furlan	1 lb/Arsenical Insecticide	Geneva	N
01-20-87	Freeway Oil Co.	Unknown/Gasoline	Austinburg	N
02-13-87	Elkem Metals	Unknown/Waste Water Unknown/Suspended Solids	Lake Erie	Y
02-20-86	Hartland Trucking Co.	30 Gallons/Diesel Oil Unknown/Farm Chemicals Unknown/Hydraulic Fluid	Denmark	N
03-09-87	Unknown	840 Gallons/Crude Oil	Spring Creek	N
03-10-87	Unknown	Unknown/Diesel Fuel	Kingsville	N
03-24-87	Conrail	Unknown/Sodium Hydroxide	Ashtabula	Unknown
03-24-87	Noah Troyer	50 Gallons/Diesel Fuel	Geneva	N
04-06-87	Pittsburgh & Conneaut Dock	Unknown/Leachate Unknown/Suspended Solids	Conneaut Creek	N
04-07-87	Unknown	Unknown/Gasoline	Storm Sewer - Geneva	N
04-07-87	SCM Chemicals Div.	10 lbs/Titanium Tetrachloride	Corner of State and Middle Road	Y
04-07-87	Ranger Express	1600 Gallons/Waste Oil Unknown/Chlorine Contamination	Jefferson	N
04-09-87	SCM Chemicals Div.	20 lbs./Titanium Tetrachloride	Corner of State and Middle Road	Y

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
05-21-87	Unknown	Unknown/Brine	Windsor	N
05-24-87	Unknown	Unknown/Gasoline	Sewers - Conneaut	N
05-26-87	SCM Chemicals Co.	1 lb/Titanium Tetrachloride	Corner of State and Middle Road	Y
06-01-87	Unknown	Unknown/Odor of Gasoline	Geneva	N
06-05-87	SCM Chemicals/ Chlorine Div.	50 lbs/Titanium Tetrachloride	Corner of State and Middle Road	Y
06-15-87	Refiners Transport	25 Gallons/Gasoline	Ashtabula	Unknown
06-15-87	Clinton Oil Co.	Unknown/Crude Oil Unknown/Fishkill	Private Pond - Geneva	N
06-19-87	Union Carbide	5 lbs/Ethylene Oxide 30 lbs/Methylene Chloride	Lake Road	N
06-19-87	SCM Chemicals/ Pigment Div.	Unknown/Titanium Tetrachloride	Corner of State and Middle Road	Y
06-12-87	Unknown	Unknown/Odor	Ashtabula	Unknown
06-26-87	Elkem Metals	100 Gallons/Kerosene	Lake Road	N
06-28-87	SCM Chemicals/ Plant 2	75 lbs/Titanium Tetrachloride	Corner of State and Middle Road	Y
07-02-87	Lock Machine	Unknown/Cutting Oil	Jefferson	N
07-03-87	SCM Chemicals/ Plant 2	50 lbs/Titanium Tetrachloride	Corner of State and Middle Road	Y
07-04-87	Cal Pinny Special Fuel	Unknown/Oil	Geneva	N

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
07-07-87	Matlack Trucking	20 Gallons/Diesel Fuel	Conneaut	N
07-12-87	Freeway Oil Co.	Unknown/Diesel Fuel Unknown/Gasoline	Austinburg	N
07-25-87	M/V Epos	50 Gallons/Diesel Fuel	Lake Erie	Y
07-29-87	Cleveland Electric Illuminating	Unknown/Fly Ash Unknown/Debris	Ashtabula River	Y
07-31-87	Red Brook Boat Club	Unknown/Waste Oil	Red Brook	N
08-03-87	Pittsburgh & Conneaut Dock	Unknown/Runoff 150 MGL/Iron	Conneaut Creek	N
08-14-87	K & J Water Service	Unknown/Drilling Fluid	Grand River	N
08-07-87	Unknown	Unknown/Brine	Colebrook	N
08-07-87	East Ohio Gas Co.	Unknown/Brine	Jefferson	N
08-28-87	Pittsburgh & Conneaut Dock	Unknown/Leachate	Conneaut Creek	N
08-12-87	SCM/Chemicals/ Plant #2	40 lbs./Chlorine Gas	2426 Middle Road	Y
08-13-87	SCM Chemicals/ Plant #1	Unknown/Titanium Tetrachloride	Corner of State and and Middle Road	Y
08-14-87	Ashtabula Yacht Club	Unknown/Gasoline	Ashtabula River	Y
08-16-87	Conrail	Unknown/Diesel Fuel	Ashtabula River	Y

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
08-20-87	SCM Chemicals/ Plant #2	6000 Gallons/Titanium	2426 Middle Road	Y
08-26-87	Unknown	Unknown/Paint Waste Unknown/Waste Solvent	Geneva	N
08-27-87	DuPont Chemical/ Conoco Truck	Unknown/Vinyl Flouride	Harpersfield	N
09-04-87	SCM Chemicals/ Plant #2	50 lbs/Chlorine (Gas)	2426 Middle Road	Y
09-08-87	SCM Chemicals/ Plant #2	30 lbs/Titanium Tetrachloride	2426 Middle Road	Y
09-14-87	Ashtabula Trailer Park	4 Gallons/Waste Oil	Private Pond - Ashtabula	Unknown
09-16-87	Unknown	Unknown/Unknown	Ashtabula River	Y
09-16-87	Unknown	Unknown/Gasoline	Sewers - Conneaut	N
09-18-87	Pittsburgh & Conneaut Dock	Unknown/Leachate	Conneaut Creek	N
09-20-87	Unknown	Unknown/Scum	Ashtabula River	Y
09-17-87	Ashtabula Street Maint.	Unknown/Fuel Oil Unknown/Asphalt Residue	Ashtabula River	Y
09-22-87	Northeast Box Co.	Unknown/Purple Dye Unknown/Red Pigment	Strong Brook	Y
09-23-87	Flying Saucer Gas Station	Unknown/Gasoline Unknown/Contaminated Soil	Ashtabula	Unknown

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
10-07-87	Pittsburgh & Conneaut Dock	Unknown/Leachate	Conneaut Creek	N
10-21-87	Elkem Metals/ Ashtabula Div.	Unknown/Odors Unknown/Particulates	Lake Road	N
10-15-87	Lee Industries	Unknown/Acetone Unknown/Toluene Unknown/Styrene Unknown/Vegetable Kill	Ashtabula River	Y
10-19-87	Advanced Medical Systems	Unknown/Fuel Oil	Geneva	N
10-16-87	Conneaut/Kelly Const.	Unknown/Paint Waste (Lead) Unknown/Paint Stripper Unknown/Wash Water	Conneaut Creek	N
10-18-87	House of Games	100 Gallons/Waste Oil	Ashtabula	Unknown
10-22-87	Pittsburgh & Conneaut Dock	750000 Gallons/Leachate	Conneaut Creek	N
10-15-87	Conneaut Public Works	Unknown/Public Waste Unknown/Paint Remover	Conneaut Creek	N
10-22-87	Polycorn Hunsman, Inc.	Unknown/Oil Unknown/Waste Chemicals Unknown/Plastic Pellets Unknown/Suspended Soils	Lake Erie	Y
10-28-87	Jefferson Stp.	250000 Gallons/Sewage	Mill Creek	N
11-01-87	SCM Chemicals/ Plant #2	35 lbs/Titanium Tetrachloride	2426 Middle Road	Y
11-06-87	Fleet Supplies Inc.	200 Gallons/Diesel Fuel	Grand River	N

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
11-06-87	Northeast Box Co.	Unknown/Ink (Flexographic)	Strong Brook	Y
11-03-87	United Telephone Serv.	250 Gallons/Fuel Oil	Jefferson	N
11-25-87	K-Mart	6 lbs/Isotox	Saybrook	N
11-21-87	Unknown	Unknown/Black Stuff	Rock Creek	N
12-10-87	Matlack Trucking Co.	100 Gallons/Crude Oil	Wayne	N
12-19-87	Ray Moulder Trucking	25 Gallons/Gasoline	Conneaut	N
01-09-88	Mr. Dennis Lynch	Unknown/Tires Unknown/Smoke	Ashtabula	Unknown
01-15-88	SCM Chemicals/ Plant #2	40 lbs/Titanium Tetrachloride	2426 Middle Road	Y
01-20-88	Saybrook F.D.	12 Gallons/Gasoline Unknown/Emulsifier	Saybrook	N
01-23-88	SCM Chemicals/ Plant #2	10 lbs/Titanium Tetrachloride	2426 Middle Road	Y
01-28-88	Grand Island Carriers	Unknown/Roofing Tar Unknown/Diesel Fuel Unknown/Adhesive	Plymouth	N
02-01-88	G.V. Gas Service Station	Unknown/Gasoline	Sewer - Orwell	N
02-08-88	RMI/Metals Reduct	1800 Gallons/ Hydrochloric Acid	State Rd.	Y
02-09-88	SCM Chemicals/ Plant #2	20 lbs/Titanium Tetrachloride	2426 Middle Road	Y

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
02-14-88	Union Carbide/ CEI Plant A	Unknown/Odor Unknown/Black Water Unknown/Coal Dust	Ashtabula	Unknown
02-18-88	Freeway Oil Co.	Unknown/Diesel Fuel	Grand River	N
02-20-88	Unknown	Unknown/Brownish Material	Lake Erie	Y
02-25-88	Ohio Water Service	Unknown/Turbidity	Ashtabula	Unknown
02-25-88	SCM Chemicals/ Plant #1	10 lbs/Titanium Tetrachloride	Corner of State and Middle Road	Y
02-29-88	Unknown	Unknown/Gasoline	Storm Sewer-Ashtabula	Unknown
05-03-83	Koski Asphalt Plant	Unknown/Flyash	4830 Middle Road	Y
03-04-88	Andover Ind.	55 Gallons/Hydrochloric Acid	Andover	N
03-28-88	SCM Chemicals/ Plant #2	3 Gallons/Titanium Tetrachloride	2426 Middle Road	Y
04-04-88	Unknown	Unknown/Crude Oil	Mill Creek	N
04-08-88	SCM Chemicals/ Plant #2	Unknown/Waste Water	Fields Brook	Y
04-18-88	SCM Chemicals/ Plant #2	100 lbs/Titanium Tetrachloride	2426 Middle Road	Y
04-12-88	Unknown	Unknown/Diesel Fuel	Andover	N
04-15-88	SCM Chemicals/ Plant #2	21 lbs/Titanium Tetrachloride	2426 Middle Road	Y

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Broo N/Y</u>
04-22-88	SCM Chemicals/ Plant #2	100 lbs/Titanium Tetrachloride	2426 Middle Road	Y
04-25-88	Unknown	Unknown/Liquid Manure	Ashtabula Creek	Y
04-25-88	Unknown	Unknown/Sewage	Ashtabula	Unknown
04-26-88	Abandoned Well	Unknown/Natural Gas	Hartsgrove	N
04-27-88	Unknown	Unknown/Green Dye	Hartsgrove	N
04-27-88	Presright	1 Drum/Drum	Jefferson	N
05-02-88	Quaker State Corp.	1 Gallon/Crude Oil	Ashlar	N
04-25-88	James Hollaway	Unknown/Oil	Windsor	N
05-02-88	Northridge Materials	Unknown/Unknown	Kingsville	N
05-06-88	Chemical Leaman Tanklines	Unknown/Polypropylene Glycol	Mill Creek	N
05-05-88	SCM Plant	Unknown/Unknown	Corner of State and Middle Road	Y
05-06-88	Lundall Twp. Road Crew	Unknown/Unknown	Geneva	N
05-06-88	SCM Plant	Unknown/Titanium	Corner of State and Middle Road	Y
05-09-88	Presright	Unknown/Green Liquid	Jefferson	N
05-13-88	Creative Cartons	Unknown/Printing Ink	Loundenville	N
05-14-88	RMI Sodium Co.	600 Lbs/Chlorine Gas	State Road	Y
05-18-88	SCM Chemicals/ Plant #2	40 lbs/Titanium Tetrachloride	2426 Middle Road	Y

FOIA INFORMATION


<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Brook N/Y</u>
05-17-88	SCM Chemicals	40 lbs/TICL4	Corner of State and Middle Road	Y
05-18-88	SCM Chemicals Inc.	Unknown/Titanium Tetrachloride	Corner of State and Middle Road	Y
05-19-88	Aimsly Warehouse	Unknown/Oil	Jefferson	N
05-23-88	Unknown	75 Gallons/Fuel Oil	Andover	N
05-25-88	Unknown	50 Gallons/Diesel	Pierpont	N
05-26-88	Unknown	Unknown/Cement	Lake Erie	Y
05-27-88	J.D. Huggins	Unknown/Resin and Plastic Sheets	Kingsville	N
05-29-88	Bill Krouse	Unknown/Unknown	Rock Creek	N
05-29-88	Unknown	100 Itm/Fishkill	Cinamon Lake	N
05-31-88	SCM Chemicals	2 lbs/TICL4	Corner of State and Middle Road	Y
06-01-88	Matlack Trucking Co.	70 Gallons/Resin Solution	Ashtabula	Unknown
06-03-88	Plaza Amoco Tom Harvey	Unknown Oil	Ashtabula	Unknown
06-04-88	RMI	50 Gallons/Oil	Fields Brook	Y
06-08-88	Consolidated Freightways	250 Gallons/Diesel Fuel	Plymouth	N
06-07-88	SCM Chemicals	21 lbs/Titanium Tetrachloride	Corner of State and Middle Road	Y
06-13-88	Grand Valley Gas	400 Gallons/Casoline	Orwell	N

FOIA INFORMATION

<u>Date</u>	<u>Spiller</u>	<u>Quantity/Type of Materials</u>	<u>Location</u>	<u>Fields Bro N/Y</u>
06-13-88	Unknown	Unknown/Gasoline	Ashtabula	Unknown
06-13-88	Gulf Oil	Unknown/Gasoline	Ashtabula	Unknown
06-19-88	SCM Chemicals/ Plant #2	Unknown/Titanium Tetrachloride	2426 Middle Road	Y
06-20-88	Ashtabula Stp.	Unknown/Sewage	Ashtabula	Unknown
06-19-88	Nelson Leasing Co.	100 Gallons/Diesel Fuel	Conneaut	N
06-21-88	Conrail Ashtabula Yards	20 Gallons/Diesel Fuel	Ashtabula River	Y
06-23-88	SCM Chemicals	30 lbs/Titanium Tetrachloride Vapors	Corner of State and Middle Road	Y
06-26-88	Bill Krouse	10 Tons/Landfill Dirt	Rock Creek	N
06-30-88	Unknown	25 Gallons/Oil	Lake Erie	Y

STATE OF OHIO
COUNTY OF ASHTABULA

Frank Tyneski, being first duly sworn, states that he is an authorized agent of SCM Corporation, that while he does not have personal knowledge of all the facts recited in the foregoing response, information contained herein with respect to Ashtabula Plant 1 has been collected, based upon discussions with knowledgeable SCM personnel and upon a search by SCM employees of those files of SCM Corporation, located in Ashtabula, Ohio, which were believed to have contained responsive information, and is true to the best of his knowledge and belief.


Frank Tyneski

Sworn to and subscribed before me this 11th day
of September, 1986.


Notary Public

KATHLEEN A. RINTO
Notary Public for the State of Ohio
My Commission Expires March 2, 1989

Ohio EPA Inter-Office Communication

TO: IWW & Surveillance Groups DATE: June 10, 1981
FROM: Kelvin Rogers - NEDO Bioassay Coordinator KFR
SUBJECT: Fields Brook Bioassay Program - Phase II

The Phase I portion of this program, the intensive screening bioassay survey, has been completed (see the attached results). The industrial dischargers which did not pass the screening bioassays will be subject to further investigation regarding the toxicity of their effluent. The people assigned to the problem companies should make arrangements for further bioassay and chemical sampling at these companies. A review of the problem entities and proposals for the next step in characterizing the toxicity of their effluents follows:

- 1) RMI Extrusion Plant 001. Further study has already been done on this facility. The toxicity found during the screening bioassays was determined to be caused by relatively high levels of residual chlorine already present in their intake water - which is city drinking water.
- 2) Gulf and Western 002 (TIC14 Plant). Toxicity is probably attributed to high TDS. A full scale bioassay to determine the EC50 of the wastewater should be the next step. Also, chemical sampling to attempt to determine what components of TDS are the primary toxicants should be performed in conjunction with the bioassay.
- 3) SCM Corporation 001. Toxicity probably attributed to high TDS levels. Same follow-up as for G & W 002.
- 4) Olin Corporation 001. Toxicity attributed to possible organic contaminants. A full scale bioassay to determine EC50 should be performed, along with general chemical analyses to verify that common pollutants are not the major toxicants. Selected parameters should also be measured in conjunction with the bioassay sampling.
- 5) General Tire and Rubber Company 001. As this station caused fairly low Daphnia immotility (30%), a second Daphnia screening bioassay should be performed to verify that this is a normal condition. Selected chemical parameters should also be measured as a check for possible toxicants.
- 6) Detrex Chemicals 002. Same follow-up as for General Tire.
- 7) Diamond Shamrock Tributary. Toxicity attributed to coal pile runoff from CEI facility. Investigation should be made into proposed treatment for this wastewater source. Further bioassay work may be necessary as pollutants from other sites may be entering this stream.

Appendix 2 is a map of the Fields Brook area showing 1983 sample survey points. As you can see a number of entities have been eliminated from consideration. No PCBs were found in the sediment above G+W which eliminates:

- SMC-Clidden Durkee
- IMC, now LCP Chemicals
- Olin
- General Tire
- G+W TiO₂ Plant
- Detrex Chemical

No PCBs were found below Diamond Shamrock, or RMI.

Two suspect tributaries at West 31st Street and Strong Brook both were PCB free. The lack of contamination in Strong Brook is significant because that eliminates Conrail, Rockwell and other entities on that storm sewer system.

Sample Data Table I.*

<u>Sample #</u>	<u>Location</u>	<u>Date</u>	<u>PPM</u>	<u>Aroclor Type</u>	<u>Type</u>
ER 453	Cook Road Field Brook	2/24/83	<0.25	-	Sediment
ER 454	Upstream Olin Field Brook	2/24/83	<0.25	-	"
ER 521	Downstream Olin Field Brook	5/12/83	<0.25	-	"
ER 457	Old Detrex Dam Swail	2/24/83	<0.25	-	"
ER 522	Below Old Detrex Outfall F.B.	5/12/83	<0.25	1248	"
ER 523	G+W Current outfall	5/12/83	180	1248	"
ER 524	G+W old outfall overflow	5/12/83	920	1248	"
ER 524	G+W old outfall overflow	5/12/83	15	1260	"
ER 603	G+W old outfall	6/28/83	330	1248	"
ER 601	G+W debris in trench	6/28/83	620	1248	"
ER 605	G+W debris around pumps	6/28/83	1600	1248	"
ER 604	G+W heater loop	6/28/83	69	1232	Oil
ER 600	G+W drip pan	6/28/83	66	1232	Oil
ER 604	G+W thermisol tank	6/28/83	13,000	1248	Oil
ER 456	150 yds. upstream S.R. Field Brook	2/24/83	650	1248	Sediment
ER 455	Acme Scrap outfall, Field Brook	2/24/83	46	1248	"
ER 458	Field Brook 100 yds. downstream State Rd.	2/24/83	<0.25	-	Sediment 6" deep
ER 459	Field Brook 100 yds. downstream State Rd.	2/24/83	<0.25	-	Sediment top
ER 460	Field Brook Rt. 11 downstream	2/24/83	<0.25	-	Sediment
ER 525	Trib. to Fields Brook @ Middle Rd. - RMI effluent ditch	12/83	<0.25	-	Sediment
ER 462	Unnamed trib. near W. 31st	2/24/83	<0.25	-	Sediment
ER 461	Strong Brook near Jack's Marina	2/24/83	<0.25	-	Sediment

*See Appendix C for sample sheets.

-3-

PCB were not found upstream in the Ashtabula River either. The sediment from near the Acme Scrap outfall was not nearly as contaminated as I had expected.

While Acme Scrap contributed some of the PCBs in the Ashtabula River, it did not contribute the majority of PCBs to the Ashtabula River sediment.

Officials of G+W $TiCl_4$ Plant stated that the system used to contain pure Aroclor's, but that these were removed by Monsanto around 1971-1972, and replaced by Therminol fluid. G+W officials also stated that the heat exchangers used to leak large volumes of oil from faulty metal gaskets, which were replaced in 1979 with better gaskets which still leak. The recirculating pumps were diked in 1979, before this copious leakage went into a storm sewer. G+W installed better treatment in the late 70's. Overflows, and bypasses, from sample results, used to allow quantities of PCBs to enter Fields Brook.

G+W installed the heat exchanger system approximately 20 years ago, and replaced one PCB fluid with another 10 years ago. Given the current state of the G+W heat loop/exchanger system and the copious quantities that have leaked out, and the sample results, I think that G+W, $TiCl_4$ Plant is the major contributor of PCBs in the Ashtabula River. I will not make any final decision regarding the other contaminants, other than to note both the Old Dam Swail area, and the unnamed tributary on State Road contain significant amounts of perchloroethylene, trichloroethylene, and other materials from Detrex Chemicals. Hopefully results from other surveys can yield definite answers as to sources of specific levels at specific chemicals. I would suggest that G+W $TiCl_4$ or SCM, who is purchasing that G+W Plant be called in for a meeting with DHEM, WW, Surveillance, ER, etc., to try and resolve the PCB situation.

Also leading me to believe that the PCBs in the basin are from G+W is Table 1, Appendix F., G+W PCB Inspection Report performed by Versar, Incorporated. That inspection found that the PCBs in the heater loop and in the Therminol tank were Aroclor 1242. G+W is the PCB source.

KH/gc

cc: Kenneth A. Schultz, ER
John Estenik, WW, Toxics
Gary Martin, S&A
Roger Hannahs, DHEM
Steve Tuckerman, NEDO, DHEM
Rob Wyzenski, NEDO, S&A
Robert Indian, ODH
Shel Simon, U.S. EPA

description of waste management practices and prior owners.

SCM currently has not located any specific information regarding contamination of its real property by prior owners or users, except as follows:

1. PCBs were discovered in an overflow trench at the Plant 2 $TiCl_4$ plant in 1983. The trench was blocked off and contaminated soil was removed from the trench and the adjacent area. The Ohio EPA and EPA were aware of this situation at the time. Attached are Documents 2292-2319 which indicate Ohio EPA's and Gulf and Western's sampling efforts and which summarize the removal and disposal of the contaminated soil.

not provided
see
p. 8

12) Provide all information you may have regarding any other sources of contamination to Fields Brook.

Response:

SCM objects to this question as being overly broad, unreasonably burdensome and calling for a speculative answer. SCM is aware of numerous publicly available studies and reports of potential sources of contamination with the Fields Brook watershed. Many of which were done by or for EPA or Ohio EPA. In preparing responses to this request, SCM came across Documents 2084-2247 which are being produced because they are older documents possibly not available to EPA presently. The following information is believed not to be reflected in such studies.

- a. Douglas Towner recalls receiving occasional reports that Plant 2 $TiCl_4$ plant personnel have observed tank trucks stopping at the State Road



MIDDLE ROAD, PLANT 2, P. O. BOX 160, AKHTANULA, OHIO 44004 (216) 997-5501

Certified Mail NO. P09 3943920
Return Receipt Requested

October 2, 1984

Mr. William Miller
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Dear Mr. Miller:

Excursions with respect to TDS and lead loading occurred on Outfall 3IE00017002 on September 12, 1984.

The dissolved solids loading was 63,536 kg/day compared to a limit of 53,900 kg/day. The concentration was 6,670 mg/l, well below the daily limit; however, coupled with a high flow of 2.5 MGD this concentration resulted in a loading excursion.

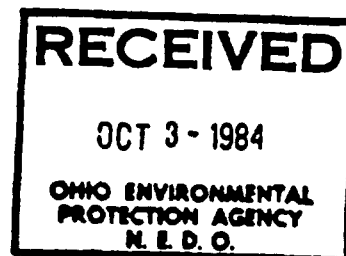
The lead loading was 1.7 kg/day versus a permit limit of 1.5 kg/day. This result is highly questionable. The lead concentration in Outfall 002 is normally <0.05 mg/l. On September 12, it was 0.18 mg/l. There is no reason why it should be that high since lead is not found in the raw materials used in this plant, and an analytical error or sample contamination is therefore suspected.

Sincerely,

AC Steinbronn
by H. K. R. E.

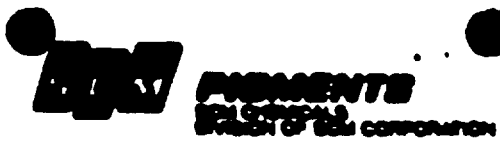
A. C. Steinbronn
TiCl4 Unit Superintendent

kr



121314

116



8455 MIDDLE ROAD, PLANT 2, P. O. BOX 100, ASHTABULA, OHIO 44004 (216) 997-8801

March 12, 1985

Mr. William Miller
Ohio Environmental Protection Agency
2110 East Aurora Road
Twinsburg, OH 44087

Dear Mr. Miller:

An excursion with respect to chromium loading occurred on Outfall 002 on February 27, 1985.

A concentration of 0.2 mg/l at a flow of 2.22 MGD resulted in a loading of 1.68 kg/day compared to a permit limit of 1.5 kg/day. Since both the pH and iron concentration were normal on that particular day, there is no explanation for the higher than normal chromium concentration which resulted in the excursion.

Sincerely,

A. C. Steinbronn
TIC14 Unit Superintendent

kr

RECEIVED

MAR 14 1985

OHIO EPA-N.E.D.

121306



114

JAN. MILLER ROAD, PLANT 2, P. O. BOX 160, ASHTABULA, OHIO 44004 (216) 997-3501

Certified Mail P09 3943924
Return Receipt Requested

December 26, 1985

RECEIVED

DEC 30 1985

OHIO EPA H.E.D.O.

Mr. William Miller
Division of Industrial Wastewater
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Dear Mr. Miller:

An excursion with respect to lead concentration and loading occurred at Outfall 002, Permit Number 31E00C17 on December 4, 1985.

The lead concentration was 0.25 mg/l and the loading was 2.05 kg/day versus the permit limits of 0.2 mg/l and 1.5 kg/day.

I can not offer an explanation for the excursions at this time but I am in the process of pulling samples to identify possible sources of lead in the plant. I will inform you of the results as I obtain them.

Sincerely,

Rodney Shimko
TIC14 Plant Superintendent

cc: D. A. Towner - SCM Pigments, Ashtabula
A. C. Steinbronn - SCM Pigments, Ashtabula

121256



JAN MILLER ROAD, PLANT 2, P. O. BOX 160, ASHTABULA, OHIO 44004 (216) 997-5501

Certified Mail
Return Receipt Requested

January 8, 1986

Mr. William Miller
Division of Industrial Wastewater
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Dear Mr. Miller:

An excursion with respect to lead concentration and loading occurred at Outfall 002, Permit Number 31ED00017 on December 25, 1985.

The lead concentration was 0.26 mg/l and the loading was 1.6 kg/day versus the permit limits of 0.2 mg/l and 1.5 kg/day.

In my letter dated 12/26/85, I mentioned that I was in the process of pulling samples to identify possible sources of lead in the plant. Based on the results I have obtained, two sources have tentatively been identified. I am continuing to investigate this matter to confirm the initial data that I have received.

Very truly yours,

Rodney Shinko
TiCl₄ Unit Superintendent

/e

cc: A. C. Steinbronn - SCM Pigments, Ashtabula II

RECEIVED

JAN - 9 1986

OHIO EPA-N.E.D.O

121255



2426 MIDDLE ROAD, PLANT 2, P. O. BOX 160, ASHTABULA, OHIO 44004 (216) 987-5301

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

March 24, 1986

Mr. William Miller
Division of Industrial Wastewater
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Dear Mr. Miller:

An excursion with respect to lead concentration and loading occurred at Outfall 002, Permit Number 3IE000017 on March 5, 1986. The lead concentration was 0.24 mg/l and the lead loading was 2.12 kg/day versus permit limits of 0.2 mg/l and 1.5 kg/day.

The maintaining of higher pH levels in the 3rd and 4th stage of the neutralization system has had a positive effect but it's not the entire answer. The question that still remains to be answered is why after so many years with no lead that we are experiencing problems now.

Envirolab is investigating this problem from their end. Envirolab has sent samples to other labs to confirm their results and have found there are discrepancies. Envirolab has indicated to us that there is a possibility that something in the effluent samples is causing interference with their analytical procedures.

Sincerely,

R. Shimko
TiCl4 Unit Superintendent

kr

cc: D. A. Towner - SCM II, Ashtabula
A. C. Steinbronn - SCM II, Ashtabula

RECEIVED
MAR 27 1986
OHIO EPA-N.E.D.O.

121246

SCM Plant 2 - TiCl₄ Plant
1704 State Road Ashtabula
(Formerly G & W Plant)

Owners:

1. Stauffer Chemical Company
2. Mallory Sharon
3. U.S. Industrial Chemicals
4. RMI Company
5. Cabot Corporation/Cabot Titania
6. Jersey Titanium Company
7. New Jersey Zinc Company
8. Gulf and Western Industries*
9. SCM Corporation

Date(s):

Prior to 1958
" " "
" " "
July 1958 to January 1963
at least 1970 - 1972
?
to 1977
1963 to July, 1983
1983 to present

Ref.Docs.: SCM-24, SCM-42, RMI-22.

*Dates based on "Plant Manager Roster" (Question 7) and prior owners from "Predecessor List" (Question 8) of SCM-24 and SCM-42. Actual employers of some managers not given.

Notes:

- (1) According to SCM, all prior owners generated the same wastes, and used the same waste management facilities. (Question 11, SCM-24).
- (2) Both the "TiO₂ Plant" and the "TiCl₄ Plant" belong to Plant 2.
- (3) PCB's were found in an overflow trench in this plant (TiCl₄ - Plant 2) in 1983, and removed subsequently.
- (4) Random dumping over State Road bridge at night reported by plant employees.

Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☒ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet 189,000

gallons _____

Total Facility Area

square feet _____

acres 90.93

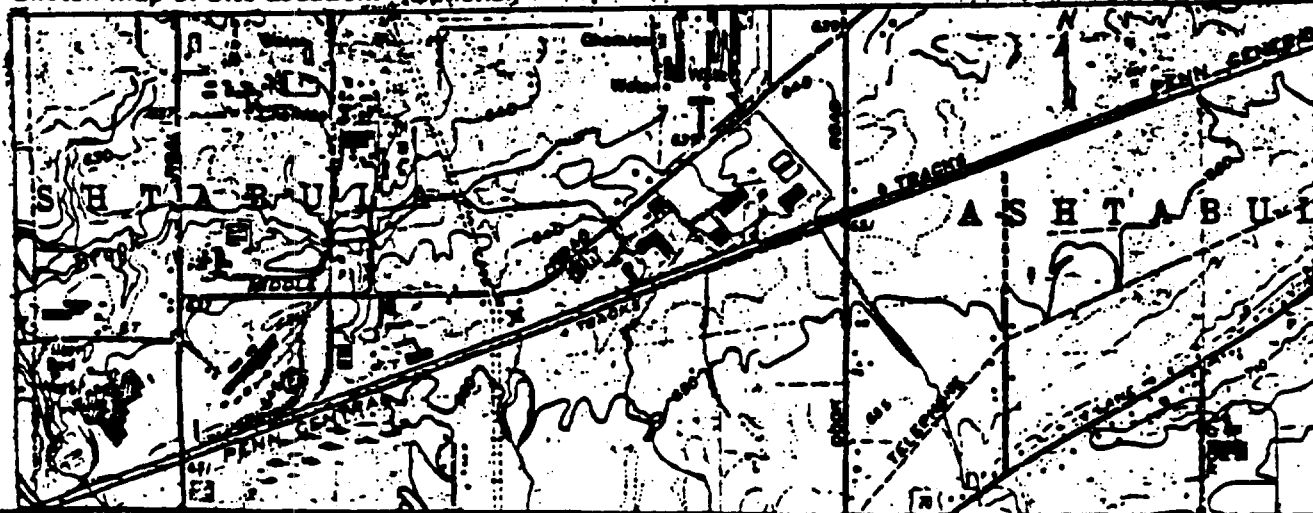
Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☒ Likely ☐ None

Note: Items Hand I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)



Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

THE SITE HAD AN OPERATIONAL FACILITY FOR THE MANUFACTURING OF BARIUM CARBONATE OR STRONTIUM CARBONATE FROM 1968 TO 1972 WHEN THE OPERATION SHUT DOWN. WASTE FROM THIS OPERATION WAS ACCUMULATED IN A WASTE PILE TO THE WEST OF THE FACILITY. THE WASTE PILE, COMMONLY CALLED BLACK ASH, REMAINS UNDISTURBED TODAY. ANALYSIS OF BORINGS OF THE WASTE PILE DISCLOSED IT EXCEEDED THE EP TOXICITY LIMIT FOR LEACHABLE BARIUM IN THE WESTERLY END OF THE PILE. THERE ARE NO WELLS IN THE IMMEDIATE VICINITY TO THE BEST OF OUR KNOWLEDGE.

SCM

00001

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other".

Name TIMOTHY C. GILLEN, PLANT MANAGER
 Street 2900 MIDDLE ROAD
 City ASHTABULA State OH Zip Code 44004
 Signature _____ Date _____

- ☐ Owner, Present
- ☐ Owner, Past
- ☐ Transporter
- ☒ Operator, Present
- ☐ Operator, Past
- ☐ Other

EPA NOTIFICATION OF HAZARDOUS WASTE SITE

Environmental Protection
Agency
Washington DC 20460

This initial notification information is required by Section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 8, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the I which applies.

NATIONAL RESPONSE CENTER INFORMATION

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name **SCM CORPORATION CHEMICAL/METALLURGICAL DIVISION**

Street **2900 MIDDLE ROAD**

City **ASHTABULA**

State **OHIO**

Zip Code **44004**

B Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site **SCM CORPORATION CHEMICAL/METALLURGICAL DIVISION**

Street **2900 MIDDLE ROAD**

City **ASHTABULA**

County **ASHTABULA**

State **OHIO**

Zip Code **44004**

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title) **GILLEN, TIMOTHY PLANT MANAGER**

Phone **(216) 998-1825 EXT. 220**

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year) **1968**

To (Year) **1972**

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:

Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

- 1. ☐ Organics
- 2. ☒ Inorganics
- 3. ☐ Solvents
- 4. ☐ Pesticides
- 5. ☒ Heavy metals
- 6. ☐ Acids
- 7. ☐ Bases
- 8. ☐ PCBs
- 9. ☐ Mixed Municipal Waste
- 10. ☐ Unknown
- 11. ☐ Other (Specify)

Source of Waste:

Place an X in the appropriate boxes.

- 1. ☐ Mining
- 2. ☐ Construction
- 3. ☐ Textiles
- 4. ☐ Fertilizer
- 5. ☐ Paper/Printing
- 6. ☐ Leather Tanning
- 7. ☐ Iron/Steel Foundry
- 8. ☒ Chemical, General
- 9. ☐ Plating/Polishing
- 10. ☐ Military/Ammunition
- 11. ☐ Electrical Conductors
- 12. ☐ Transformers
- 13. ☐ Utility Companies
- 14. ☐ Sanitary/Refuse
- 15. ☐ Photofinish
- 16. ☐ Lab/Hospital
- 17. ☐ Unknown
- 18. ☐ Other (Specify)

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 300 regulations (40 CFR Part 261).

Specific Type of Waste:

EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site located.

0005

SCM

000540



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE OH 02 SITE NUMBER OH 007674144

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) SCM CORPORATION
02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 2900 MIDDLE ROAD
03 CITY ASHTABULA
04 STATE OH 05 ZIP CODE 44004 06 COUNTY ASHTABULA 07 COUNTY CODE 07 08 CONG. DIST. 11
09 COORDINATES LATITUDE 41 53 34. N LONGITUDE 80 45 10. W ASHTABULA NORTH QUADRANGLE

10 DIRECTIONS TO SITE (Starting from nearest public road):
FROM HIGHWAY 11 PROCEED NORTH ON STATE ROAD TO MIDDLE ROAD.
ABOUT ONE MILE EAST ON MIDDLE ROAD, PLANT IS ON THE SOUTH SIDE

III. RESPONSIBLE PARTIES

01 OWNER (Business) SCM CORPORATION
02 STREET (Business making residential) 2900 MIDDLE ROAD
03 CITY ASHTABULA
04 STATE OH 05 ZIP CODE 44004 06 TELEPHONE NUMBER (216) 442-1825
07 OPERATOR (Business making residential) SAME AS ABOVE
08 STREET (Business making residential)
09 STATE OH 10 ZIP CODE 11 TELEPHONE NUMBER
12 TYPE OF OWNER (Business making residential)
☒ A PRIVATE ☐ B FEDERAL ☐ C STATE ☐ D COUNTY ☐ E MUNICIPAL
☐ F OTHER ☐ G UNKNOWN

14 OWNER/OPERATOR NOTIFICATION (Date received)
☒ A RCRA 3001 DATE RECEIVED 8/18/80 ☐ B UNCONTROLLED WASTE SITE (RCRA 3001) DATE RECEIVED
☐ C OTHER

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON-SITE INSPECTION
☒ YES DATE 1/23/80
☐ NO
02 SITE STATUS (Check one)
☒ A ACTIVE ☐ B INACTIVE ☐ C UNKNOWN
03 YEARS OF OPERATION
BEG. YEAR 1974 PRESENT
END YEAR
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED
HEAVY METALS (TOXIC/PERSISTANT)
ACIDS (CORROSIVE/TOXIC)
INORGANIC CHEMICALS (TOXIC/PERSISTANT/SOLUBLE)
OTHER ORGANIC CHEMICALS (TOXIC/PERSISTANT/SOLUBLE)
SLUDGE (TOXIC/PERSISTANT)
SOLVENTS (TOXIC/FLAMMABLE/IGNITABLE)
OILY WASTE (TOXIC/SOLUBLE/IGNITABLE)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
GROUND WATER (ENVIRONMENT)
SURFACE WATER (POPULATION/ENVIRONMENT)
DIRECT CONTACT (POPULATION)

V. PRIORITY ASSESSMENT FIT
01 PRIORITY FOR INSPECTION (Check one if high or medium is checked, complete Part 2 Waste Information and Part 3 Description of Hazardous Conditions and Incidents)
☐ A HIGH (Inspection required promptly) ☐ B MEDIUM (Inspection required) ☒ C LOW (Inspect on time available basis) ☐ D NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT GARY GIFFORD
02 OF (Agency Organization) U.S. ENVIRONMENTAL PROTECTION AGENCY-ATDO
03 TELEPHONE NUMBER 12161425-9171
04 PERSON RESPONSIBLE FOR ASSESSMENT TIMOTHY J. MALEY
05 AGENCY U.S. EPA
06 ORGANIZATION REGION V FIT
07 TELEPHONE NUMBER 1312183-9015
08 DATE 7/25/85
MONTH DAY YEAR

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply) <input checked="" type="checkbox"/> A SOLID <input type="checkbox"/> B POWDER/FINES <input type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER _____ <small>(Specify)</small>	02 WASTE QUANTITY AT SITE <small>(Measure of mass quantities must be independently)</small> TONS _____ CUBIC YARDS _____ NO. OF DRUMS _____	03 WASTE CHARACTERISTICS (Check all that apply) <input checked="" type="checkbox"/> A TOXIC <input type="checkbox"/> B CORROSIVE <input type="checkbox"/> C RADIOACTIVE <input type="checkbox"/> D PERSISTENT <input type="checkbox"/> E SOLUBLE <input type="checkbox"/> F INFECTIOUS <input type="checkbox"/> G FLAMMABLE <input type="checkbox"/> H IGNITABLE <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE
---	--	--

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	Q1 GROSS AMOUNT	Q2 UNIT OF MEASURE	Q3 COMMENTS
SLU	MUDGE	45,874.41	CUBIC YARDS	
OLW	OILY WASTE	400	GALLONS	
SOL	SOLVENTS	100	GALLONS	
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	NO RECORD		
IOC	INORGANIC CHEMICALS	NO RECORD		
ACD	ACIDS	12,974.8	TONS	
BAS	BASES			
MES	HEAVY METALS	13,100.0	TONS	

IV. HAZARDOUS SUBSTANCES (See A-10)

[illegible]

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (City-specific references, e.g., state/fax sample analysis reports)

SEE ATTACHED INFORMATION

Potential Hazardous Waste Site
Preliminary Assessment

SCM Corporation
2900 Middle Road
Ashtabula, Ohio

OHD 076-741-149

The SCM Corporation is located on Middle Road in the city of Ashtabula, Ashtabula County, Ohio. The facility is situated in an industrial area that has one of the largest and most diversified concentration of chemical plants in Ohio. The SCM plant is near the southern shore of Lake Erie and directly south of the Union Carbide Corporation. SCM manufactures titanium dioxide (TiO_2) which is used as a pigment for paint, paper, and plastics. Sherwin Williams sold the facility to SCM in 1972.

To make TiO_2 , SCM uses chlorine gas in the presence of carbon (coke) to react with titanium ore to produce liquid titanium tetrachloride. The $TiCl_4$ is purified to TiO_2 . The treated process wastewaters from the wastewater treatment facility, are held in two retention basins for solids settling and metals precipitation. The basin sludges are collected and disposed of off-site. The process waters are then neutralized in a H_2SO_4 tank and discharged through NPDES outfall 001 to Fields Brook. The system contains a large emergency holding basin to contain any spills at the plant.

Most of the wastes (HCl, non-halogenated solvents, oils, and pigments) generated at SCM are disposed of off-site. The site does contain two rubber-lined metal tanks designed to store process waste acid. The present status of these tanks are unknown. The site had an operational facility for the manufacturing of barium carbonate or strontium carbonate from 1968 to 1972. Waste from this operation was accumulated in a waste pile to the west of the facility. The waste pile, commonly called Black ash, remained undisturbed in 1981. Analysis of borings of the waste pile disclosed it exceeded the EP Toxicity limit for leachable barium in the westerly end of the pile. The present status of the waste piles is unknown.

On several occasions, SCM outfalls have exceeded the NPDES limits for pH and total dissolved solids. A Daphnia bioassay proved positive in a series of tests ran on outfall 001 effluent water in 1980. The Ames test and a static fish bioassay proved negative.

Due to the Fields Brook NPL project, it is recommended that this site be given a low priority for FIT activities and a medium priority for State actions.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
OH OH DE 76141141

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 152 04 NARRATIVE DESCRIPTION

NO OBSERVED RELEASE OR MONITORING WELLS ON-SITE. POSSIBLE CONTAMINATED EFFLUENT DISCHARGE MAY SEEP INTO GROUNDWATER. ALSO HEAVY METALS FROM WASTE PILES MAY LEACH INTO GROUNDWATER. THERE ARE FEW WELLS NEAR THIS LOCATION AND ARE SET INTO RELATIVELY IMPERMEABLE DELONIAN SHALE.

01 ☒ B SURFACE WATER CONTAMINATION 02 ☒ OBSERVED (DATE 1980) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 0 04 NARRATIVE DESCRIPTION

LOCAL RESIDENTS AND INDUSTRIES USE LAKE ERIC WATER. INTAKES ARE OUTSIDE A 3 MILE RADIUS. SEVERAL PH AND DISSOLVED SOLIDS NPDES VIOLATIONS HAVE BEEN SITED AT OUTFALL COI. AN ORGANIC CHEMICAL (1,1-DICHLOROETHANE) WAS ONCE DETECTED IN OUTFALL DMS DISCHARGE.

01 ☒ C CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 36000 04 NARRATIVE DESCRIPTION

POSSIBLE AIR CONTAMINATION DUE TO AIRBORNE DISPENSAL OF CONTAMINATES IN EXPOSED WASTE PILE.

01 ☒ D FIRE/EXPLOSION CONDITIONS 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 12000 04 NARRATIVE DESCRIPTION

SPENT SOLVENTS MAY BE STORED ON SITE WHICH ARE IGNITABLE/FLAMMABLE. NO REPORTED FIRE ON SITE TO DATE.

01 ☒ E DIRECT CONTACT 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 3247 04 NARRATIVE DESCRIPTION

SCM EMPLOYEES (219 people) AND PEOPLE WITHIN 3 MILE RADIUS (3000 people) MAY HAVE ACCESS TO SITE IF SECURITY IS INADEQUATE.

01 ☒ F CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED 91 (Acres) 04 NARRATIVE DESCRIPTION

WASTE PILES MAY BE LEACHING OUT HEAVY METAL INTO SURROUNDING SOIL. POSSIBLE SPILLS FROM VARIOUS COMPOUNDS USED IN PLANT PROCESSES.

01 ☒ G DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 152 04 NARRATIVE DESCRIPTION

SEE SECTIONS A AND B ABOVE.

01 ☒ H WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED 219 04 NARRATIVE DESCRIPTION

EMPLOYEES MAY BECOME EXPOSED TO HAZARDOUS MATERIALS IF INADEQUATELY SECURE.

01 ☒ I POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 36000 04 NARRATIVE DESCRIPTION

SEE SECTIONS C AND E

IF CONTAMINATE TRAVELS FROM FIELDS BROOK TO ASHTABULA RIVER, PEOPLE MAY COME IN CONTACT WITH CONTAMINATE RECREATIONALLY. OHIO DEPARTMENT OF HEALTH AND ODEP ENKTER A FISH BAN IN THE ASHTABULA RIVER.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
OH OH DO K74121

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL

☐ ALLEGED

CONTAMINATED CUTTAILS MAY DISCHARGE HAZARDOUS MATERIAL ONTO FIELDS.
BROCK AQUATIC PLANTS. POSSIBLE SPILLS FROM VARIOUS COMPOUNDS USED IN
PAINT PROCESSES MAY REACH FLOOD.

01 ☒ K DAMAGE TO FAUNA

04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL

☐ ALLEGED

FISH IN FIELDS BROCK MAY BECOME CONTAMINATED FROM CUTTAIL DISCHARGES.
DAPHNIA BIODASSAY PROVED POSITIVE IN LAB TEST; MORTALITY AVERAGED 70% IN THE
24 AND 48 HOUR TESTS. FISH BAN IN EFFECT IN THE ASHTABULA RIVER

01 ☒ L CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL

☐ ALLEGED

FISH FROM FIELDS BROCK MAY TRAVEL TO THE ASHTABULA RIVER AND THUS
BE EATEN OR FISHED. SEE SECTION K ABOVE.
FISH BAN IN EFFECT IN THE ASHTABULA RIVER.

01 ☒ M UNSTABLE CONTAINMENT OF WASTES

(Spills from standing liquids leaking drums)

03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

WASTE PILES MAYBE EXPOSED, UNUNITED, OR UNCAPPED. ON SITE STORAGE TANKS, DRUMS
OF CANS MAY BE INSPECTED. MANY NPDES VIOLATIONS.
N/A DENT SOLUTION

01 ☒ N DAMAGE TO OFFSITE PROPERTY

04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL

☐ ALLEGED

CONTAMINATES MAY COME IN CONTACT WITH PROPERTY DOWNSTREAM FROM
SITE.

01 ☒ O CONTAMINATION OF SEWERS STORM DRAINS WWTPs

04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL

☐ ALLEGED

DISCHARGE SYSTEM MAY BECOME CONTAMINATED. (OUTFALLS)

01 ☐ P ILLEGAL UNAUTHORIZED DUMPING

04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL

☐ ALLEGED

NONE OBSERVED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: 36000

IV. COMMENTS

FACILITY STILL ACTIVE. RECENT COMPLIANCE RECORDS (WITHIN A YEAR)
WILL BE HELPFUL

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

SEE ATTACHED SOURCES OF INFORMATION.

July 30, 1980

Compliance Sampling Inspections (CSI's) - Olin Corporation, General Tire Corporation, and SCM Corporation in Ashtabula

Gary Amendola
THRU: A. R. Winkhofer, Director, EDO

Kenneth Fenner, SEWPE
ATTN: William Miner, SEWPE

Attached are three CSI-toxic reports prepared by Mark Moloney for the Olin Corporation, SCM Corporation, and General Tire Company. These plants are located in Ashtabula Township, Ohio and discharge to Fields Brook, a tributary of the Ashtabula River. The compliance sampling inspections were completed pursuant to your December 19, 1979 request.

Although each of the plants were found to be achieving NPDES limits at the time of the surveys, Fields Brook continues to exceed by a wide margin water quality standards for dissolved solids. Upstream of these facilities, the concentration of dissolved solids was 300 mg/l while downstream it was 2214 mg/l. This concentration is above both the Ohio Water Quality standard for a Warmwater Habitat (1500 mg/l) and the Limited Warmwater Habitat standard (2000 mg/l). Both Olin and SCM were found to contribute significantly to the dissolved solids problem in Fields Brook. The measured dissolved solids loadings during these inspections were:

SCM - 35,603 lbs/day
Olin - 13,012 lbs/day
General Tire - 2,412 lbs/day

Samples collected upstream and downstream of the Olin, SCM and General Tire discharges also indicated that the levels of copper and zinc marginally exceed the Warmwater Habitat standards.

In addition to the testing done to determine the levels of conventional pollutants discharged from the plants, static bioassays (fish and daphnia), scans for organic pollutants, and the Ames test were performed to detect the presence of any toxic and carcinogenic/mutagenic compounds.

The results and a discussion of this testing are included in the attached reports. Both the Olin and the General Tire discharges were found to contain numerous organic priority pollutants in trace amounts. The bioassay testing showed the effluents from all three plants are toxic to daphnia during a 48 hour exposure. Neither the General Tire or the SCM effluent was toxic to fathead minnows during a 96 hour exposure period and the exposure of fish to the Olin effluent was inconclusive. The results of the Ames testing for General Tire and SCM were negative, however, the Ames testing conducted for Olin indicated the presence of mutagenic/carcinogenic compounds.

A similar report for the Diamond Shamrock - Solvent Works Plant will be forwarded to you as soon as outstanding organic data are received. Regarding the other dischargers on Fields Brook, previous sampling at PMA-Solvent and Chlorine Plant showed no detectable residual chlorine (0.07 mg/l) and trace contamination of a few organic chemicals. Ames and Ames testing were not conducted for this plant. The M-I-Metals Refining Plant has not been sampled for organic pollutants and Ames

tests been completed. Based upon the nature of this operation, we do not suspect significant organic contamination. However, positive Bioassay and Ames tests may be possible. Likewise the RAI - Extrusion Plant has not had a CSI-toxic survey. There may be no organics in this discharge, but the low level radioactivity associated with this operation may produce positive results in an Ames Test. The Detrex operation is a potential source of organics and should be a candidate for testing. Testing of the Gulf and Western-Titanium Dioxide Plant is expected to result in findings similar to those for SCM. Notwithstanding the above, depending upon the regulatory strategy for Fields Brook, it may be advisable to complete CSI-toxics surveys at all plants and conduct additional studies (Ames, Bioassays) at Olin Corporation based upon the initial findings, and at Diamond Shamrock, owing to the highly variable nature of the production operations.

All dischargers and the Ohio EPA have requested data from these surveys. Please advise us what information can be released at this time.

If you have any questions concerning the information contained in the attached reports, please call Mark Moloney at FTS 293-7260.

Attachments

cc:
Glenn Pratt, SEP
Howard Zar, SE

**SCM PIGMENTS
SCM CORPORATION
ASHTABULA PLANT II
ASHTABULA, OHIO**

PCB's

**SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
TITANIUM TETRACHLORIDE UNIT (TiCl4)**

NATIONAL RESPONSE CENTER
INFORMATION

**PREPARED BY:
ROBERT L. SUTTMAN
JULY 1984**

SCM

002265

The following is the SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN for the Titanium Dioxide Unit of G+W, Chemicals Division, located on Middle Road, Ashtabula, Ohio.

<u>Tank No.</u>	<u>Capacity</u>	<u>Contents</u>	<u>Location</u>	<u>Purpose</u>
FB-469	25,000	No. 6 Fuel Oil	Underground East of Utility Building	Boiler Fuel
FB-1A	20,000	No. 2 Fuel Oil	Underground North-east of Cooling Tower	Process Heater Fuel
FB-1B	20,000	No. 2 Fuel Oil	Underground North-east of Cooling Tower	Process Heater Fuel
FA-24X	6,000	Paracymene	South of Cl ₂ Recovery	Process Heating Oil
FB-10 A & B	4,000	Crude Oil	East of Maintenance Building	Store Separated Oil from Gas Well

There are three areas in the TiO₂ Unit where large volumes of oil are handled and where the potential for an oil spill is reasonable. These are:

1. Paracymene Storage which has been diked to trap the entire tank volume plus 30% for rain water.
2. Oil unloading for paracymene, No.2 and No.6 fuel oil.
The oil from spills in this area would be trapped in the effluent ponds as explained below.

SGM

002269

The following is the SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN for the Titanium Tetrachloride Unit of G+W, Chemicals Division, located on State Road, Ashtabula, Ohio.

<u>Tank No.</u>	<u>Capacity</u>	<u>Contents</u>	<u>Location</u>	<u>Purpose</u>
FB-532	25,000	No. 2 Oil	Above ground East of Change House	Process Heater Fuel
FB-468	15,000	Paraffin Oil	East of garage	Process Additive
FB-457	5,000	Paraffin Oil	East of FA-421	Process Additive
FB-458	6,000	Therminol	East of Change House	Process Heating Oil
FB-459	1,000	Therminol	Above Storage Tank 458	Process Heating Oil
FB-112	22,200	Therminol	Northeast of Thickener	Containment PCB

All the above tanks are diked to prevent oil seepage to the ground water.

BULK STORAGE TANKS

All oil tanks are routinely inspected for leaks, oil accumulation inside dikes, and signs of damage or deterioration by operating supervision. A semi-annual inspection is conducted by a maintenance supervisor or a member of the Engineering Department in conjunction with the Production Superintendent or Assistant Production Superintendent. A record of these inspections will be kept on file for a period of three years, as required by FWPCA.

SCM

002283



MIDDLE ROAD, PLANT 2, P. O. BOX 160, ASHTABULA, OHIO 44004 (216) 997-5501

April 24, 1984

Bruce R. Granoff
Jersey Miniere Zinc Company
P.O.Box 1104
Clarksville, TN 37040

RE: PCB Cleanup Status Report

The drip pan from EA-426 heat exchanger has been cut up and the pieces placed in a drum for disposal. A new pan was fabricated and put in place. The trench leading from EA-436 heat exchanger to the main process trench was cleaned, as was the curbed area under the therminol heater. Dirt and debris from these activities, as well as some gloves and rags, were placed in drums for disposal. All drums have been properly labelled. As agreed in the meeting with U.S. EPA in Chicago, we have provided a marked drum for liquid collected in the new drip pan.

No work has been done on the GA-510 overflow trench. Soil samples were taken from the trench by Ohio EPA on April 5, 1984. The samples were split, and our samples were analyzed by Wadsworth Laboratories, Inc. The results ranged from less than 1 ppm to 240 ppm; the laboratory's analytical report is attached.

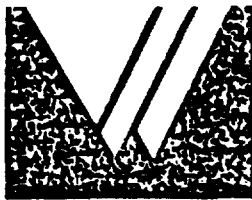
The drawings requested by Dr. Sheldon Simon have been completed. These are drawings of GA-510 overflow trench, 10-D-2555 and 10-D-2556, and a plot plan of the TiCl4 Unit showing process trenches, stormsewer and sanitary piping.

Costs incurred to date are as follows:

Fabrication of new drip pan	\$ 285.12
Cutting up old pan	95.04
Purchase of 20 drums	516.60
Labor, 55 man-hours @ \$11.94	656.83
Drafting labor, 62 man-hours @ \$22.00	1,364.00
Laboratory analyses	900.00
	<hr/>
	\$3,817.59

SCM

002293



WADSWORTH TESTING LABORATORIES, INC.

P.O. Box 208 • 1600 Fourth St. • Canton, Ohio 44701 • (216) 434-3809

April 19, 1984

REPORT OF ANALYSIS

To: SCM Pigments
P.O. Box 160
Ashtabula, Ohio 44004

Attn: Mr. A. F. Simmen

Lab. Test Nos. 75653-54
Your P.O. #1922-1771

SUBJECT: Twelve samples submitted to laboratory on 4/10/84 for PCB analyses (soils)

SAMPLE IDENTIFICATION

PCB

#1		43 mg/Kg - Aro 1248
#2		13 mg/Kg - Aro 1248
#3	Less than	1 mg/Kg
#4		8 mg/Kg - Aro 1248
#5	Less than	1 mg/Kg
#6	Less than	1 mg/Kg
#7	Less than	1 mg/Kg
#8		18 mg/Kg - Aro 1248
#9		3 mg/Kg - Aro 1248
#10		10 mg/Kg - Aro 1248
#11		9 mg/Kg - Aro 1248
#12		240 mg/Kg - Aro 1248

Note: All samples analyzed as received.

WADSWORTH TESTING LABORATORIES, INC.

Marvin W. Stephens, Ph. D.

SCM

000295



Member of American Council of Independent Laboratories • American Society for Testing Materials
Society for Applied Microbiology • American Foundrymen's Society • American Chemical Society



PIGMENTS

SCM CHEMICALS
DIVISION OF SCM CORPORATION

PCB File

MIDDLE ROAD, PLANT 2, P. O. BOX 160, ASHTABULA, OHIO 44004 (216) 997-5501

October 2, 1984

CERTIFIED MAIL NO. P09 3943919
Return Receipt Requested

Bruce R. Granoff
Jersey Miniere Zinc Company
P.O.Box 1104
Clarksville, TN 37040

BCC: AJW/Baltimore: (10/03/84/kr)
V. J. Mazza-w/Sketch only
J.W.Slack-w/Sketch only

RE: PCB Clean-up Status Report

The following PCB related clean-up activities have been completed at the request of G+W Industries, Inc.:

1. Disposal of drip pan from EA-436.
2. Cleaning of distillation area trench and disposal of soil and debris.
3. Cleaning of curbed area under therminol heater and disposal of soil and debris.
4. Removal and disposal of soil from the north-south and east-west trenches originating at GA-510 sump. The concrete walls of the north-south trench were in poor condition and presented a safety hazard. They were therefore demolished and the trench filled with stone and gravel.
5. About 68 cubic yards of soil were removed from a 1600 square foot area bordered by the trench on the east and by the plant property line on the north. In addition, about 24 cubic yards were removed from a 325 square foot area east of the trench. (See attached sketch) The area and depth of removal were chosen on the basis of sample analyses and the contour of the ground. The removed soil was replaced with stone and gravel.
6. The piping of the obsolete heat transfer system (aroclor heater) was flushed with No. 2 fuel oil. It was then dismantled by SCM personnel and disposed of by Rollins Environmental Services. The liquid was shipped to Deer Park, Texas, for disposal.

This completes the clean-up project authorized by G+W Industries, Inc. Disposal costs will be submitted by Rollins directly to the G+W offices in New York. Charges incurred for SCM services since the last bill was submitted in May 1984 are as follows:

SCM

0000 50

GENERATOR ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 19 84

FACILITY INFORMATION

(Specify facility to which all wastes on this page were sent)

VIII. GENERATOR'S EPA I.D. NO.

G, O, H, D, 0, 7, 6, 7, 4, 1, 1, 4, 9, 1, 2
1 2 13 14 15

IX. FACILITY'S EPA I.D. NO.

O, H, D, 0, 0, 3, 8, 4, 3, 4, 4, 8
1 2 3 4 5 6 7 8 9 10 11 12

X. FACILITY NAME

R, E, S, E, R, V, E, E, N, V, I, R, O, N, M, E, N, T, A, L, S, E, R, V, I, C, E, S
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

XI. FACILITY'S ADDRESS

4, 6, 3, 3, M, I, D, D, L, E, R, O, A, D
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Street or P.O. Box

A, S, H, T, A, B, U, L, A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20O, H, 4, 4, 0, 0, 4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

City or Town

State/Zip Code

XII. WASTE IDENTIFICATION

XII. WASTE IDENTIFICATION					B. DOT HAZARD CLASS		C. USEPA HAZARDOUS WASTE NUMBER (see instructions)		D. AMOUNT OF WASTE		E. NUMBER OF CONTAINERS		
LINE	A. DESCRIPTION OF WASTE												
1	WASTE HYDROCHLORIC ACID GENERATED					0	2	00020007		43936		T	
	IN CHLORIDE PROCESS OF TiO2 PRODUCTION							0008					
2													
3													
4													
5													
6													
7													
8													
XIII. COMMENTS					B		C		D		E		

Return along with your ANNUAL REPORT for 1984 to Ohio EPA, Division of Solid & Hazardous Waste Management

RECYCLING/REDUCTION SURVEY

Generator Name: SCM CORPORATION EPA ID Number: OH0076741149
 Generator Address: 2900 MIDDLE ROAD ASHTABULA, OHIO 44004
 Contact Person: J. R. WIESE Phone Number: (216) 998-1825

For the following, please complete these items only for hazardous waste generated in 1984 at your own facility.

- A. List the amount/type of characteristic/listed hazardous waste recycled in 1984. Please list by individual waste type. Waste Descriptions, U.S. EPA Hazardous Waste Numbers, and Amount of Waste should match those given on your Annual Report. Complete the last column (On-site/Off-site), only for recycled waste. If you recycled a specific waste both on-site and off-site, list each on a separate line.

If you recycled material that otherwise would have been classified as "D" - code or characteristic hazardous waste, please list this also, even if you did not include this material on your Generator Annual Report because of the reporting exclusion for recycled characteristic waste (OAC 3745-50-06 or 40 CFR 261.6).

Description of Waste	U.S. EPA Haz. Waste No.	Amount of Waste Generated in 1984	Unit of Measure P(LBS.)/T(TONS) Specify for each entry	Amount of This Waste Recycled in 1984	Recycled On-site or Off-site?
Examples: Trichloroethylene	P001	3,500	P	3,500	On-site
Lead Paint Waste	D008	64	T	32	Off-site
WASTE HYDROCHLORIC ACID GENERATED IN CHLORIDE PROCESS OF TiO2	D002				
1. PRODUCTION	D007	47,386	T	3,450	ON-SITE
SPENT SOLVENT FROM DISPERSION TESTS OF					
2. TiO2 LABORATORY	D001	8	T		
WASTE POLYCHLORINATED BIPHENYL.					
3. TRANSFORMER OIL CONTAINING UNDER 500 PPM PCB	UN2315	3	T		
4.					
5.					
6.					
7.					
8.					

SCM

002330

- B. Do you expect to recycle more hazardous waste in the future?YESNO ..X...N/A (Not sure or already at 100%)
- C. "Waste reduction" means that smaller amounts of hazardous waste are generated by implementing process changes, segregating wastes, substituting non-hazardous for hazardous components, or improving process controls. During 1984, were you able to reduce the amount of waste generated by using one of the practices? (This does not include recycling or waste concentration by removal of water).YES ..X...NON/A
- During 1983?YES ..X...NON/A
- Do you have waste reduction plans for 1985? ..X...YESNON/A
- D. Do you feel there is a need for more off-site commercial recycling facilities or capacity in your area? ..X...YES
....NONOT SURE
- For what type of waste? Description of Waste: HYDROCHLORIC ACID
US EPA Haz. Waste No.: D002
- E. The Northeast Industrial Waste Exchange Listings Catalog is sent to over 900 hazardous waste generators in Ohio. This service is financially supported, in part, by Ohio EPA. Your company should be receiving the Listings Catalog now if you have not requested cancellation of your subscription. Would you like to continue to receive the NIE Listings Catalog? ..X...YESNO

Please change Listings Catalog mailing addressee/address to: _____

Other Comments:

2. During 1983, did you recycle these materials at your own facility or did a commercial recycler handle all or part of this material?

☒ Recycled at own facility ☒ All or part handled by commercial recycler

3. Do you have established plans to recycle a higher percentage of this material in 1984 or the near future?

☐ YES ☐ NO ☒ Probable after 1984 ☐ Not likely in the near future

4. "Waste reduction" means that smaller amounts of hazardous waste are generated by implementing process changes, segregating wastes, substituting end-products, or improving process controls. During 1983, were you able to reduce the amount of waste generated by using one of these practices? (This does not include recycling or waste concentration).

☐ YES ☒ NO

5. In 1984, do you plan to implement any waste reduction methods at your facility?

☐ YES ☐ NO ☐ Probable after 1984 ☒ Not likely in the near future

6. Do you have a need for more technical information (from a consultant, trade organization or other source) concerning waste recycling and/or reduction?

☐ YES ☒ NO

7. Do you feel there is a need for more off-site commercial recycling facilities or capacity in your area?

☒ YES ☐ NO

8. Which of the following do you feel has the greatest negative effect on hazardous waste recycling or reduction?

☐ Regulatory requirements ☒ Economic conditions/ equipment Costs ☐ Lack of Technical information/ feasibility

9. Have you considered using the services of the Northeast Industrial Waste Exchange and its Listings Catalog but rejected the idea?

☐ YES ☒ NO If yes, why? _____

10. Would you like to continue to receive the NIE Listings Catalog?

☒ YES ☐ NO If no, why? _____

Other comments:

SCM

002334

GENERATOR ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 19 **83**

FACILITY INFORMATION

(specify facility to which all wastes on this page were sent)

VIII. GENERATOR'S EPA I.D. NO.

TAC

G 0 H D 0 7 6 7 4 1 1 4 9 1 2

IX. FACILITY'S EPA I.D. NO.

X. FACILITY NAME

O H D 0 0 3 8 4 3 4 4 8

R E S E R V E E N V I R O N M E N T A L S E R V I C E S

XI. FACILITY'S ADDRESS

4 6 3 3 M I D D L E R O A D

Street or P.O. Box

A S H T A B U L A

City or Town

O H 4 4 0 0 4

State Zip Code

XII. WASTE IDENTIFICATION

LINE NUMBER	A. DESCRIPTION OF WASTE	B. DOT HAZARD CLASS	C. USEPA HAZARDOUS WASTE NUMBER (See Instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE (Enter Code)
1	WASTE HYDROCHLORIC ACID GENERATED IN CHLORIDE PROCESS OF TIO ₂ PRODUCTION	0 2	U 0 1 2	4,137.8	T
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

XIII. COMMENTS (enter information by section number)

SCM

002337

OHIO ENVIRONMENTAL PROTECTION AGENCY
GENERATOR ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1982

FACILITY INFORMATION

(specify facility to which all wastes on this page were sent)

VIII. GENERATOR'S EPA I.D. NO.

TAC

010107674114912
 1 2 13 14 15

IX. FACILITY'S EPA I.D. NO.

X. FACILITY NAME

0101003843448
 16 27

RESERVE ENVIRONMENTAL SERVICES
 28 59

XI. FACILITY'S ADDRESS

4633 MIDDLE ROAD
 28

Street or P.O. Box

ASHTABULA
 28

City or Town

State Zip Code

XII. WASTE IDENTIFICATION

LINE NUMBER	A. DESCRIPTION OF WASTE	B. DOT HAZARD CLASS		C. USEPA HAZARDOUS WASTE NUMBER (See Instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE (Enter Code)
1	WASTE HYDROCHLORIC ACID GENERATED IN CHLORIDE	0	2	0102	13191647	T
2	PROCESS OF TiO ₂ PRODUCTION					
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

XIII. COMMENTS (enter information by section number)

SCM CC2340



SCM CORPORATION

INTER-OFFICE MEMO

FROM: M. F. WETZEL DATE: MAY 5, 1981 FOR: S. BRESLOW
LOCATION: ASHTABULA - #1923 TOWSON - #1995
ANSWERING
LETTER OF:
SUBJECT: SUPERFUND - JUNE 9, 1981 REQUIREMENT

THE NOTIFICATION OF HAZARDOUS WASTE SITE UNDER THE SUBJECT REGULATIONS HAS BEEN FILLED OUT AND IS ATTACHED FOR YOUR REVIEW AND COMMENTS.

IT IS CALLED TO YOUR ATTENTION THAT ONLY THAT PART OF THE BLACK , ASH WASTE PILE FOUND HIGH IN LEACHABLE BARIUM IS REPORTED. NAMELY, 7,000 CUBIC YARDS OR 189,000 CUBIC FEET. IN THE OPTIONAL DESCRIPTION OF THE SITE, IT IS MENTIONED THAT ONLY PART OF THE PILE WAS FOUND TO BE HAZARDOUS.

SHOULD FURTHER QUESTIONS ARISE, PLEASE CALL ME.


M. F. WETZEL

MEW/JAG

ATTACH.

CC: T. C. GILLEN
W. P. HARDEE
F. TYNESKI, JR.
J. R. WIESE

SCM

000000

WASTE MINIMIZATION ADDENDUM TO GENERATOR BIENNIAL OR
ANNUAL HAZARDOUS WASTE REPORT FOR 1985

THIS REPORT IS FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1985.

The Hazardous and Solid Waste Amendments of 1984 require all generators of hazardous waste to submit the following information to the United States Environmental Protection Agency or a State authorized to collect such information:

GENERATOR's EPA I.D. No. 10|H|D|0|6|1|0|2|9|6|8|2|

GENERATOR NAME: SCM PIGMENTS - ASHTABULA PLANT II

GENERATOR ADDRESS: 2426 Middle Road (P.O.Box 160)

Ashtabula, OH 44004

WASTE MINIMIZATION

Describe in the space below your efforts, undertaken during calendar year 1985, to reduce the volume and toxicity of the hazardous waste which your business generates. Also describe changes in waste volume and toxicity actually achieved during 1985 in comparison to previous years, to the extent possible.

In late November 1984 a new process started up at our facility and became fully operational at the beginning of 1985.

Use of the new process eliminates a necessity to dispose of some sulfuric acid (H_2SO_4) which was used in the old process to dry Cl_2 . About 200 tons/year was transported off-site for neutralization.

Several other materials which could be hazardous under certain circumstances ($pH < 2$) are no longer used. There is no real reduction in disposal for these as disposal was not necessary. Materials from the process were disposed of on a one-time basis during the year as equipment was dismantled.

Several PCB-containing capacitors were sent off-site for incineration after replacement with non-PCB types.

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Douglas A. Towner
PRINT/TYPE NAME

Plant Manager
TITLE

Douglas A. Towner
SIGNATURE

2-3-86
DATE SIGNED

002057

Request 37

Describe the location and size of each lagoon, pond, waste pile, trench or pit that as existed on the DCI property and its purpose. For each lagoon, pond, waste pile, trench or pit describe:

- a. Any hazardous substances that may be, or have been, contained in them.
- b. The dates of each structure's existence and use.
- c. Any construction properties of each pit, pond, trench or lagoon which would help prevent the release of materials from it.
- d. If not in use now, explain how it was closed or has been modified and the present use of the area.
- e. Any pictures, sketches or maps of these facilities.

Response 37

(A) State Road Facility (State Road Plant)

Refer to attached drawing, Detrex SR1000-3 showing location of ponds/lagoons, waste pile and trench (Appendix 8).

Ponds and Lagoons

- a. See responses 10 (A) (2), 17 (A) (1), 17 (A) (2) and 17 (A) (3).
- b. Ponds/lagoons #3 through #9 were constructed, used and their use discontinued by Hooker-Detrex prior to 1953. Ponds/lagoons #1 and #2 were constructed by Hooker-Detrex also and were used for several years after 1953 as settling ponds. Pond/lagoon #10 was constructed by Detrex and used during the last eight years of plant operation (1964-1972) to store the liquid still bottoms from the solvent residue recovery process.
- c. The entire DCI State Road property sits on a thick impermeable clay layer. When these ponds were formed this clay was used to form the walls by Hooker-Detrex.
- d. All ponds (except #2, #3, #7, #8 and #9) were cleaned by Koski Construction Company, capped with clay and planted with grass. Koski Construction Co. hauled the dredged material to their landfill on Middle Road.

Pond #2 (see Sketch 1000-3) which was identified in a 1975 report issued by the USEPA as Lagoon #6 was emptied by Browning & Ferris and hauled to their East Palestine, Ohio facility for disposal in 1976.

Prior to closing the number two pond, several hundred drums were crushed and buried in the bottom of this pond/lagoon with approval of Mr. D. Seeds of the Ohio EPA. This was performed in the spring of 1976 by digging to a depth of 6 ft. (after draining lagoon) and finally covering with 2 ft. of compacted clay and planted with grass as per Mr. Seeds' instructions.

During the period when the aforementioned ponds/lagoons were being closed, progress reports were submitted to Ohio EPA with a copy to D. Hatfield of the Federal EPA, Chicago District office. The last report was sent on July 25, 1977 indicating work completed as requested and, unless we received further word, we would consider the matter closed. No further requests from EPA were received regarding the ponds/lagoons.

SGM
002085

(3) Sulfur Base Compounds

Wastes from these products were:

(a) Dilute hydrochloric acid solution. Estimated amount is approximately 75,000 gals/year.

(b) The inorganic phase referred to in response 15 (C) (3) above is approximately 200,000 gals/year.

(4) Mercapto thiazole adduct is estimated to produce approximately 6,000 to 7,000 gals/year of 10-15% hydrochloric acid solution in water.

(5) Phosphorus Pentoxide Adducts

No by-products or waste streams were produced from processing these products.

Request 17

Describe the storage, treatment and disposal practices for any by-products or wastes associated with each of the manufacturing processes described in response 15. This description should identify any use of drums, tanks, lagoons, ponds, waste piles, ditches, marshes, swamps, land treatment or disposal areas, public sewers, landfills, creeks, or waterways used or affected by such practices.

Response 17

(A) State Road Facility (State Road Plant)

(1) Storage, treatment and disposal practices for hazardous substances in response 15 (A) (1).

Hexachlorobutane crystals were stored in a ground surface pile and, eventually, moved to a concrete pad, stored in fiber drums and sent to Rollins Environmental Services in Bridgeport, New Jersey for incineration (See response 26 for details).

High Boiling Chlorinated Hydrocarbons, Calcium Chloride in water, Chlorinated C2 hydrocarbons, Ferrous and Ferric Chloride in water, Calcium and Sodium Hydroxide and Hypochlorite in water and Ammonium Chloride in water was discharged to settling ponds. Water was decanted through a ditch into Fields Brook. Solids and settled organics, including still bottoms, were dredged by Koski Construction Co. and hauled by them to their landfill on Middle Road, Ashtabula County. See answer to question 37 d. for closure of the lagoon referred to above.

(2) Storage, treatment, and disposal practices for hazardous substances in response 15 (A) (2).

Calcium Chloride and Calcium Hydroxide in water were discharged to settling ponds where water was decanted through a ditch into Fields Brook, solids were dredged by Koski Construction Co. and hauled by them to their landfill on Middle Road, Ashtabula County. See response 37 d. for closure of the ponds referred to above.

(3) Storage, treatment and disposal practices for hazardous substances from response 15 (A) (3) and 16 (A) (3).

Some hydrochloric acid waste was hauled in Detrex tank trucks to ponds owned by Koski Construction Co. on Middle Road, Ashtabula County, and Koski was paid to put the material into his landfill.

Calcium chloride and calcium hydroxide in water, resulting from neutralization of waste hydrochloric acid, was discharged to settling ponds and handled as in 17 (A) (2) above.

(4) Storage, treatment and disposal practices for hazardous substances from response 15 (A) (4) and 16 (A) (4).

Monomethylamine water solution was discharged through outfall 002 to Fields Brooks under controlled pH condition according to NPDES permit.

Furan water solution was discharged through outfall 002 to Fields Brook under controlled pH condition according to NPDES permit.

High boiling methyl pyrrole derivatives were stored in storage tanks and, eventually, shipped to Hukill Chemical Co., Bedford, Ohio, which arranged to have the materials incinerated.

(5) Storage, treatment and disposal practices for hazardous substances from response 15 (A) (5) and 16 (A) (5).

The wastes described under response 16 (A) (5) above were discharged through outfall 002 to Fields Brook under controlled pH conditions according to NPDES permit.

(6), (7), (8), (9), (10), (11) Storage, treatment and disposal practices for hazardous substances from responses 15 (A) (6) thru 15 (A) (11) and 16 (A) (6) thru 16 (A) (11).

There are no hazardous wastes produced in the processes described under responses 15 (A) (6) thru 15 (A) (11).

(B) Middle Road Facility (Chlor-Alkali Plant)

(1) Storage, treatment and disposal practices for hazardous substances in 15 (B) (1) and 16 (B) (1).

Small amounts of mercury were contained in the wastewater discharged to Lake Erie (through an effluent ditch) until DCI was advised by EPA that such practices were deemed unsafe, after which time DCI was granted an NPDES permit. A lagoon was used for storage on a temporary basis until mercury in the effluent met EPA guidelines.

Mercury in hydrogen by-product was recovered by condensation for re-use. This reduced the mercury concentration down to a level acceptable to EPA Air Quality and then the hydrogen was discharged to atmosphere through a stack, or conveyed to Linde Air products via pipe line, or to DCI on State Road for burning with chlorine to make hydrogen chloride.

We believe that mercury in solid waste from brine settler was hauled away by a salt company prior to the institution of lagoons. It was then placed in lagoon area, which eventually was closed by one of the companies that succeeded DCI. Sodium hypochlorite in waste was discharged to Lake Erie through an effluent ditch with a controlled pH within EPA guidelines.

Request 12

Provide the following information regarding any french drains or sewer lines (including storm, sanitary or combined sewers) which receive or have received runoff from the property located near State Road in Ashtabula County, Ohio:

- (a) The location of each sewer line.
- (b) Whether each sewer line is connected to the main trunk line.
- (c) Does any sewer line have direct or indirect access to Fields Brook or a tributary thereof?

Response 12

- (a) Enclosed under Appendix 5 is a Burgess & Niple, Ltd. drawing taken from the Burgess & Niple report showing the sewer lines.
- (b) No, the only line connected to a trunkline running North-South is 002. See Response 12 (c) below.
- (c) The line described as 002 does connect to a North-South line leading to Fields Brook, jointly used by RMI Chlorine-Sodium plant, Diamond Shamrock and DCI. This trunkline discharges to Fields Brook.

Request 13

Provide the following information regarding drainage ditches which receive or have received runoff or discharges from the property located near State Road in Ashtabula County, Ohio:

- (a) The location of each drainage ditch.
- (b) Whether runoff or discharge from each drainage ditch has direct or indirect access to Fields Brook or a tributary thereto.
- (c) Any information regarding the presence, or potential for releases, of hazardous substances or constituents in the ditches.

Response 13

- (a) Enclosed under Appendix 5 is a Burgess & Niple, Ltd. drawing taken from the Burgess & Niple report showing these ditches.
- (b) Yes.
- (c) Detrex has no information regarding the presence or potential for releases of hazardous substances or constituents in the ditches other than those contained in the various reports listed in our response to question 9 (A).

Request 14

Does your company have, or did your company ever have, an NPDES permit for discharges to Fields Brook or a tributary thereto?

Response 14

Yes.

Request 15

Describe each manufacturing process that DCI has operated at its Ashtabula County, Ohio, facilities including the facility on State Road. For each process provide the

(3) Sulfur Base Compounds

Wastes from these products were:

(a) Dilute hydrochloric acid solution. Estimated amount is approximately 75,000 gals/year.

(b) The inorganic phase referred to in response 15 (C) (3) above is approximately 200,000 gals/year.

(4) Mercapto thiazole adduct is estimated to produce approximately 6,000 to 7,000 gals/year of 10-15% hydrochloric acid solution in water.

(5) Phosphorus Pentoxide Adducts

No by-products or waste streams were produced from processing these products.

Request 17

Describe the storage, treatment and disposal practices for any by-products or wastes associated with each of the manufacturing processes described in response 15. This description should identify any use of drums, tanks, lagoons, ponds, waste piles, ditches, marshes, swamps, land treatment or disposal areas, public sewers, landfills, creeks, or waterways used or affected by such practices.

Response 17

(A) State Road Facility (State Road Plant)

(1) Storage, treatment and disposal practices for hazardous substances in response 15 (A) (1).

Hexachlorobutane crystals were stored in a ground surface pile and, eventually, moved to a concrete pad, stored in fiber drums and sent to Rollins Environmental Services in Bridgeport, New Jersey for incineration (See response 26 for details).

High Boiling Chlorinated Hydrocarbons, Calcium Chloride in water, Chlorinated C2 hydrocarbons, Ferrous and Ferric Chloride in water, Calcium and Sodium Hydroxide and Hypochlorite in water and Ammonium Chloride in water was discharged to settling ponds. Water was decanted through a ditch into Fields Brook. Solids and settled organics, including still bottoms, were dredged by Koski Construction Co. and hauled by them to their landfill on Middle Road, Ashtabula County. See answer to question 37 d. for closure of the lagoon referred to above.

(2) Storage, treatment, and disposal practices for hazardous substances in response 15 (A) (2).

Calcium Chloride and Calcium Hydroxide in water were discharged to settling ponds where water was decanted through a ditch into Fields Brook, solids were dredged by Koski Construction Co. and hauled by them to their landfill on Middle Road, Ashtabula County. See response 37 d. for closure of the ponds referred to above.

- d. Whether the waste contained hazardous substances.
- e. The amount of wastes involved.
- f. If known, where at Reserve's landfill the wastes were disposed.
- g. Describe all terms of any arrangement for the disposal of these materials.
- h. What records if any have ever been maintained documenting such disposal and arrangements for disposal.

Response 31

We have no records of dealing with Reserve Environmental Services in the landfill west of LaBounty Road.

We have arranged for disposal of materials thru Koski Construction Co. (which later changed its name to Reserve Environmental Services) at the landfill on the east side of LaBounty Road in Ashtabula County, Ohio.

- a. Approximate time: 1956 - 1975.
- b. We have no analysis of solids. Our best recollection is earth with solid calcium hydroxide and possibly some solid ferric chloride, ferric hydroxide and chlorinated hydrocarbons.
- c. We have no analysis of liquid wastes but our best recollection is that it is water containing dissolved calcium hydroxide and possibly some dissolved ferric chloride, hydrochloric acid and some chlorinated hydrocarbons.
- d. See Items b. and c.
- e. No records kept.
- f. We have no records to indicate in what part of the landfill east of LaBounty Road the wastes were placed.
- g. Material was hauled by Koski in his trucks to his landfill. DCI paid for the hauling. No records of the amount paid for such services.
- h. None to the best of our knowledge.

Request 32

Has DCI ever observed any leachate escaping or being released from the DCI storage or disposal areas on property owned or operated by DCI? If so, describe the location and physical characteristics of the leachate such as color, odor or viscousness. When and by whom has this been observed?

Response 32

No records have been found but it is recalled that, sometime during the period 1979 - 1981, a week of heavy rain washed out a part of the sidewall of pond/lagoon #3. A small amount of colorless, odorless liquid material came out of the lagoon and

PART B

(Office use only)

Discharge Serial No.
000205-004

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge										
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	METHOD OF ANALYSIS	CONTINUOUS MONITORING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
NICKEL-TOTAL 01067	0.02	0.0200	0.050	0.0600	0.0600	0.0500	0.0092	A	O	ES	A
POTASSIUM-TOTAL 00937	1.0	0.800	0.50	0.5998	0.5998	0.500	0.0916	A	O	AA	A
SELENIUM-TOTAL 01147	0.04	<0.0100	0.010	0.0120	0.0120	0.0100	0.0018	A	O	ES	A
SILVER-TOTAL 01077	<0.01	<0.0100	<0.0100	<0.0120	<0.0120	<0.0100	<0.0018	A	O	ES	A
SODIUM-TOTAL 00929	1.0	4.00	18.000	21.5914	21.5914	18.000	3.2987	A	O	AA	A
THALLIUM-TOTAL 01059	<0.1	<0.10	<0.100	<0.1200	<0.1200	<0.100	<0.0183	A	O	ES	A
TIN-TOTAL 01102	<0.01	<0.0100	<0.0100	<0.0120	<0.0120	<0.0100	<0.0018	A	O	ES	A
TITANIUM-TOTAL 01152	<0.01	<0.0100	0.080	0.0960	0.0960	0.0800	0.0147	A	O	ES	A
ZINC-TOTAL 01092	<0.01	<0.0100	0.08	0.0960	0.0960	0.0800	0.0147	A	O	ES	A
OIL AND GREASE 00550	A	A	A					A	O		A

PART B

(Office use only)

Discharge Serial No.
000205-004

B-2. (cont.)

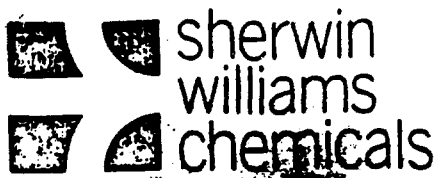
CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge									
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	METHOD OF ANALYSIS	CONTINUOUS MONITORING
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) (11)
PHENOLS 32730										
SURFACTANTS 38260										
ALGICIDES* 74051										
CHLORINATED HYDRO-CARBONS* (EXCEPT PESTICIDES) 74052										
PESTICIDES* 74053										

*Name specific compound(s) and fill in the required data for each. Use extra blanks at the end of the form and the "Remarks" space as necessary.

SCM

000437



P. O. Box 310
2900 Middle Road
Ashtabula, Ohio 44004
Phone: 216-998-1825

MARCH 5, 1973

MR. A. H. MANZARDO, CHIEF PERMIT BRANCH
ENVIRONMENTAL PROTECTION AGENCY, REGION V
UNITED STATES OF AMERICA
1 NORTH WACKER DRIVE
CHICAGO, ILLINOIS 60606

REFERENCE: N.P.D.E.S. APPLICATION
No. OH 070 022 000205
REVISION OF APPLICATION
CORPS OF ENGINEERS DISCHARGE PERMIT
REFERENCE NUMBER 000205
ASHTABULA PLANT
SHERWIN-WILLIAMS CHEMICALS DIVISION
THE SHERWIN-WILLIAMS COMPANY
P. O. Box No. 310
ASHTABULA, OHIO 44004

DEAR MR. MANZARDO:

ATTACHED TO THIS LETTER ARE THE REVISIONS TO THE REFERENCED ORIGINAL APPLICATION FOR A CORPS OF ENGINEERS DISCHARGE PERMIT. THE REVISIONS ARE THOSE DISCUSSED JANUARY 3, 1973, IN A PHONE CONVERSATION BETWEEN MR. F. C. GAUGUSH, THE SHERWIN-WILLIAMS COMPANY, AND MR. RONALD TURNER, U.S.E.P.A., WITH A SUBSEQUENT CONFIRMING LETTER FROM MR. G. F. SCHLAEDCKER, GROUP VICE-PRESIDENT, CHEMICALS, THE SHERWIN-WILLIAMS COMPANY, TO MR. A. H. MANZARDO, CHIEF, PERMIT BRANCH, U.S.E.P.A.

BASIS FOR THE REVISIONS ARE EVENTS OCCURRING AFTER THE FILING OF THE ORIGINAL APPLICATION FOR FOUR DISCHARGE PERMITS. THREE OF THE FOUR ORIGINAL DISCHARGES ARE NO LONGER IN EXISTENCE, BEING ELIMINATED, WHICH LEAVES ONLY DISCHARGE SERIAL NO. 000205-001, TIDOX(R) OPERATION. ELIMINATION OF THE THREE DISCHARGE PERMITS CHANGES THE WATER BALANCE INTO AND FROM THE PLANT SITE.

ORIGINAL DISCHARGE, SERIAL NUMBER 000205-002, FOR THE CHEMICALS OPERATION IS NO LONGER IN EXISTENCE, AS A RESULT OF PHASING OUT THE CHEMICALS OPERATION ON THE PLANT SITE.

DISCHARGES IDENTIFIED IN THE ORIGINAL APPLICATION AS DISCHARGE SERIAL NUMBERS 000205-003 AND 000205-004, POWER HOUSE DISCHARGE AND COOLING WATER DISCHARGE RESPECTIVELY, NO LONGER ARE EFFLUENT FROM THE PLANT SITE. AN IMPROVED TREAT PROCESS FOR THE WASTE WATER TREATING FACILITIES (COMPLETED IN THE THIRD QUARTER OF 1972) NOW CONTAINS THE DISCHARGES ON THE PLANT SITE.

SW

THE SHERWIN-WILLIAMS CO

000438

MR. A. H. MANZARDO, U.S.E.P.A.
MARCH 5, 1973

2.

REVISIONS IN PARTS A AND B OF THE ORIGINAL CORPS OF ENGINEERS DISCHARGE PERMIT APPLICATION SHOW THE EFFECTS OF ELIMINATING THREE DISCHARGES AND REDUCING THE TOTAL WATER INTAKE FOR THE PLANT.

BASIS FOR REVISIONS IN PARTS A AND B FOR SPECIFIC PARAMETERS, PHYSICAL, CHEMICAL, AND BIOLOGICAL, IS THE PREVIOUSLY NOTED TELEPHONE CONVERSATION BETWEEN MR. F. C. GAUGUSH AND MR. RONALD TURNER. ALL MEASURED PARAMETERS, PART A, ARE BY ADDITIONAL ANALYSES REDEFINED AND THESE CHANGES ARE PRESENT IN THE REVISED PART A.

IN THE ORIGINAL PART B, MEASURED PARAMETERS LESS THAN OR EQUAL TO THE CONCENTRATION OF THE INCOMING WATER ARE DEFINED SUFFICIENTLY BY THE ORIGINAL APPLICATION. ALL OTHER PARAMETERS NOT MEETING THOSE CONDITIONS ARE NOW, BY ADDITIONAL ANALYSES, REDEFINED FOR THE REVISED PART B.

ALL PARAMETERS, PHYSICAL, CHEMICAL, AND BIOLOGICAL, UNDERLINED WITH RED ARE THOSE IN THE ORIGINAL PERMIT APPLICATION WHICH ARE NOT REDEFINED BY ADDITIONAL ANALYSES IN THE ATTACHED REVISION.

IF WE CAN BE OF ANY FURTHER ASSISTANCE IN THE MATTER OF THE ORIGINAL OR REVISED APPLICATION, PLEASE CONTACT US.

YOURS VERY TRULY,

SHERWIN-WILLIAMS CHEMICALS

G. F. SCHLAUDERER
GROUP VICE PRESIDENT, CHEMICALS



G. F. WYMAN
PLANT MANAGER
ASHTABULA, OHIO

CC: MR. RONALD TURNER
MR. GORDON YESSER

ATTACHMENTS

GFW/CA

418

SCM

000439

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

APPLICATION FOR PERMIT TO DISCHARGE OR WORK IN NAVIGABLE WATERS AND THEIR TRIBUTARIES

SECTION I. GENERAL INFORMATION

1. State	Application Number (to be assigned by Corps of Engineers)			
O H	---	---	---	---
	Div.	Dist.	Type	Sequence No.

2. Name of applicant and title of signing official THE SHERWIN-WILLIAMS COMPANY; GROUP VICE PRESIDENT,
CHEMICALS, G. F. SCHLAUDECKER

3. Mailing address of applicant THE SHERWIN-WILLIAMS COMPANY
101 PROSPECT AVE., N.W.
P. O. Box No. 6027
CLEVELAND, OHIO 44101

4. Name, address, telephone number and title of applicant's authorized agent for permit application coordination and correspondence.
G. F. WYMAN, PLANT MANAGER
SHERWIN-WILLIAMS CHEMICALS DIVISION
P. O. Box No. 310
ASHTABULA, OHIO 44004
PHONE: 216-998-1825

NOTE TO APPLICANT: Refer to the pamphlet entitled "Permits for Work and Structures in and for Discharges or Deposits into Navigable Waters" before attempting to complete this form.

Required Information

- All information contained in this application will, upon request, be made available to the public for inspection and copying. A separate sheet entitled "Confidential Answers" must be used to set out information which is considered by the applicant to constitute trade secrets or commercial or financial information of a confidential nature. The information must clearly indicate the item number to which it applies. Confidential treatment can be considered only for that information for which a specific written request of confidentiality has been made on the attached sheet. However, in no event will identification of the contents and frequency of a discharge be recognized as confidential or privileged information.
- The applicant shall furnish such supplementary information as is required by the District Engineer in order to evaluate fully an application.
- If additional space is needed for a complete response to any item on this form, attach a sheet entitled "Additional Information." Indicate on that sheet the item number to which answers apply.
- Drawings required by items 20 and 21 should be attached to this application. Other papers which must be attached to this application include, if applicable, copies of a water quality certification or a written communication which describes water quality impact (see item 22 and item 10 of Section II below), the additional information sheet(s) in "c" above, and the confidential information sheet described in "a" above.

Fees

If any discharge or deposit is involved, an application fee of \$100 must be submitted with this application. An additional \$50 is required for an additional point of discharge or deposit.

Signature

- If a discharge is involved, an application submitted by a corporation must be signed by the principal executive officer of that corporation or by an official of the rank of corporate vice president or above who reports directly to such principal executive officer and who has been designated by the principal executive officer to make such applications on behalf of the corporation. In the case of a partnership or a sole proprietorship, the application must be signed by a general partner or the proprietor. Other signature requirements are discussed in the pamphlet.
- If no discharge is involved, an application may be signed by the applicant or his authorized agent.

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate.

18 U.S.C. Section 1001 provides that:

Signature of Applicant
G. F. SCHLAUDECKER, GROUP VICE PRESIDENT

Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and wilfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

FOR CORPS OF ENGINEERS USE ONLY

Acronym name of applicant

Are discharge structures

Major? ☐ Minor? ☐ N/A? ☐

Date received, form not complete

Date received, form complete but without certificate

Date received, form complete

Date of Cert./Ltr.

Date sent to EPA, form not complete

Date sent to EPA, NOAA, D/I, AEC, FPC in complete form

day mo yr

day mo yr

If structures exist, or dredging, filling or other construction will occur, the precise location of the activity must be described.

(Office use only)

- a. Name the corporate boundaries within which the structures exist or the activity will occur.

16. SECTION 10

17. County ASHTABULA

18. City or Town N/A (ASHTABULA TOWNSHIP)

- b. Name of waterway at the location of the activity

19. FIELD'S BROOK, ASHTABULA RIVER TRIBUTARY

20. Maps and sketches which show the location and character of each structure or activity, including any and all outfall devices, dispersive devices, and non-structural points of discharge, must be attached to this application.

21. For construction or work in navigable waters for which a separate permit is sought under 33 U.S.C. 403, the character of each structure must be fully shown on detailed plans to be submitted with this application. Note on the drawings those structures for which separate discharge information (Section II of this form) has been submitted.

22. List all approvals or denials granted by Federal, interstate, State or local agencies for any structures, construction, discharges or deposits described in this application.

Type of document	Id. No.	Date	Issuing Agency
DISCHARGE PERMIT	2366	2-11-70/	OHIO WATER POLLUTION
TIDOX OPERATION		12-1-70	CONTROL BOARD,
			OHIO DEPARTMENT OF HEALTH

23. Check if facility existed or was lawfully under construction prior to April 3, 1970. ☒

24. If dredging or filling will occur:

State the type of materials involved, their volume in cubic yards, and the proposed method of measurement.

DOES NOT APPLY.

25. Describe the proposed method of instrumentation which will be used to measure the volume of any solids which may be deposited and to determine its effect upon the waterway.

VOLUMETRIC FLOW IS MEASURED ALONG WITH ANALYTICAL DETERMINATION OF SUSPENDED SOLIDS. SUSPENDED SOLIDS PRESENT IN THE TREATED WASTE DISCHARGE WILL REMAIN IN SUSPENSION TEMPORARILY BUT WILL SETTLE EVENTUALLY.

26. State rates and periods of deposition described in Item 25.

RATE OF DEPOSITION OF SOLIDS WILL BE RECORDED AS POUNDS PER DAY OF TOTAL SUSPENDED SOLIDS. (ESTIMATES NOT TO EXCEED 100 POUNDS PER DAY.) PERIODS OF DEPOSITION WILL BE ON A CONTINUOUS DISCHARGE BASIS FOR ONE MONTH.

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SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is a. Present <input checked="" type="checkbox"/> b. Proposed new or changed <input type="checkbox"/>		2. Implementation schedule <input type="checkbox"/>	(Office use only)
Name of corporate boundaries within which the point of discharge is located. State: <u>OHIO</u> County: <u>ASHTABULA</u> City or Town: <u>N/A (ASHTABULA TOWNSHIP)</u>			3. Discharge Serial No. <u>000205-001</u>
State the precise location of the point of discharge. 7. Latitude <u>41</u> Degrees; <u>53</u> Min; <u>41</u> Sec. 8. Longitude <u>80</u> Degrees; <u>45</u> Min; <u>10</u> Sec.		9. Name of waterway at the point of discharge. <u>FIELD'S BROOK, A TRIBUTARY OF THE ASHTABULA RIVER</u>	
10. Has application for water quality certification or description of impact been made? If so, give date: Date: <u>06</u> <u>09</u> <u>71</u> mo day yr Check if certificate is attached to form <input type="checkbox"/> Name Issuing Agency: _____			
11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process). <u>SIC 281 GENERAL PROCESS: MANUFACTURER OF INORGANIC CHEMICALS</u> <u>SIC 2816 SPECIFIC PROCESS: MANUFACTURER OF TITANIUM DIOXIDE</u> <u>PIGMENTS (TIDOX(R))</u>			
12. Standard industrial classification number. <u>SIC 2816</u>	13. Principal product. <u>TITANIUM DIOXIDE</u> <u>PIGMENTS</u>	14. Amount of principal product produced per day. <u>AVERAGE 71.0 TON</u> <u>PER DAY</u>	
15. Principal raw material. <u>SEE ITEMS 13 AND 14</u>	16. Amount of principal raw material consumed per day. <u>SEE ITEMS 13 AND 14</u>	17. Number of batch discharges per day. <u>CONTINUOUS DISCHARGE</u>	
18. Average gallons per batch discharge. <u>SEE ITEM 17</u>	19. Date discharge began. <u>09</u> <u>01</u> <u>69</u> mo day yr	20. Date discharge will begin. <u>SEE ITEM 19</u> mo day	
21. Describe waste abatement practices. <p>PROCESS EFFLUENTS FROM THE TIDOX^(R) OPERATION ARE COLLECTED IN ACID BRICK TRENCHES AND ROUTED TO A CENTRAL MIXING BASIN. SODIUM-HYDROXIDE IS ADDED TO AN AGITATED MIXING BASIN TO NEUTRALIZE. OTHER DISCHARGES ARE COLLECTED IN DITCHES AND PUMPED TO THE SAME AGITATED BASIN FOR NEUTRALIZATION. NEUTRALIZED WATER OVERFLOWING THE BASIN FLOWS THROUGH TWO RETENTION BASINS IN SERIES (CAPACITY: 800,000 GALLONS EACH) WHERE THE WATER IS CLARIFIED BY SEDIMENTATION. OUTFALL FROM THE RETENTION POND FLOWS INTO FIELD'S BROOK WITH CONTINUOUS INSTRUMENT MONITORING OF FLOW TEMPERATURE, DISSOLVED OXYGEN, TURBIDITY AND CONDUCTIVITY. AT EIGHT HOUR INTERVALS, LABORATORY PERSONNEL ANALYZE FOR SUSPENDED SOLIDS AND PH AS A CHECK.</p> <p><u>ESEPAR, ESEGRE, DREACT, DHYSIC, RECYCL, OMONIT, PSEDIM, CNEUTR, SLAGOO, SLANDD, TPROCE</u></p>			

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22.

PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Intake		Discharge			(Office use only)		
Parameter and Code	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
	(1)	(2)	(3) ADDENDUM (1)	(4)	(5)	(6)	(7)
Flow (Gallons per day) 00056	792,509	792,509	695,520	388,800	864,000	DYLY	REC
pH 00400	8.1	9.5	7.1	6.5	8.0	"	REC
Temperature (Winter) (°F) 74028	46	46	74	59	75	"	REC
Temperature (Summer) (°F) 74027	75	75	89	75	109	"	REC

Discharge Serial No.
000205-001

23.

DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Color 00080	X		Aluminum 01106	X		Nickel 01067	?	
Turbidity 00070	X		Antimony 01097	?		Selenium 01147	?	
Radioactivity 74050	?		Arsenic 01002	?		Silver 01077	?	
Hardness 00900	X		Beryllium 01012	?		Potassium 00937	X	
Solids 00500	X		Barium 01007	?		Sodium 00929	X	
Ammonia 00610	X		Boron 01022	?		Titanium 01152	X	
Organic Nitrogen 00605	X		Cadmium 01027	?		Tin 01102	?	
Nitrate 00620	X		Calcium 00916	X		Zinc 01092	?	
Nitrite 00615	?		Cobalt 01037	?		Algicides 74051		X
Phosphorus 00665	X		Chromium 01034	?		Oil and Grease 00550		X
Sulfate 00945	X		Copper 01042	?		Phenols 32730		X
Sulfide 00745	?		Iron 01045	?		Surfactants 38260	?	
Sulfite 00740	?		Lead 01051	?		Chlorinated Hydrocarbons 74052	?	
Bromide 71870	?		Magnesium 00927	?		Pesticides 74053	X	
Chloride 00940	X		Manganese 01055	?		Fecal Streptococci Bacteria 74054	?	
Cyanide 00720	?		Mercury 71900	?		Coliform Bacteria 74056	?	
Fluoride 00951	?		Molybdenum 01062	?				

Has all known hazardous or potentially hazardous substances in your plant been inventoried?



Yes



No

24b. If yes, have steps been taken to insure that there exists no possibility of any such known hazardous or potentially hazardous substance entering this discharge?



Yes



No

25. Remarks.

PART A, COL. 4, BASIS OF THE CALCULATION WAS 71 TONS PER DAY OF
TITANIUM DIOXIDE PIGMENTS.

The information above completes the basic reporting requirements which are required of all applicants. Those applicants whose discharge results an activity included within any of the Standard Industrial Classification Code (SIC Code) categories listed below must complete Part A of this form.

CRITICAL INDUSTRIAL GROUPS

SIC 098	FISH HATCHERIES, FARMS, AND PRESERVES	SIC 285	PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS
SIC 10-14	DIVISION B - MINING	SIC 2871	FERTILIZERS
SIC 201	MEAT PRODUCTS	SIC 2879	AGRICULTURAL PESTICIDES, AND OTHER AGRICULTURAL CHEMICALS, NOT ELSEWHERE CLASSIFIED
SIC 202	DAIRY PRODUCTS	SIC 2891	ADHESIVES AND GELATIN
SIC 203	CANNED PRESERVED FRUITS, VEGETABLES (EXCEPT SEAFOODS, SIC 2031 AND 2036)	SIC 2892	EXPLOSIVES
SIC 2031, 2036	CANNED AND CURED FISH AND SEAFOODS; FRESH OR FROZEN PACKAGED FISH AND SEAFOODS	SIC 29	PETROLEUM REFINING AND RELATED INDUSTRIES
SIC 204	GRAIN MILL PRODUCTS	SIC 3011, 3069	TIRES AND INNER TUBES; FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED
SIC 206	SUGAR	SIC 3079	MISCELLANEOUS PLASTICS PRODUCTS
SIC 207	CONFECTIONARY AND RELATED PRODUCTS	SIC 311	LEATHER TANNING AND FINISHING
SIC 208	BEVERAGES	SIC 32	STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
SIC 209	MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS	SIC 331	BLAST FURNACES, STEEL WORKS, AND ROLL AND FINISHING MILLS
SIC 22	TEXTILE MILL PRODUCTS	SIC 332	IRON AND STEEL FOUNDRIES
SIC 23	APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS	SIC 333, 334	PRIMARY SMELTING AND REFINING OF NON-FERROUS METALS; SECONDARY SMELTING AND REFINING OF NONFERROUS METALS
SIC 242	SAWMILLS AND PLANING MILLS	SIC 336	NONFERROUS FOUNDRIES
SIC 2432	VENEER AND PLYWOOD	SIC 347	COATING, ENGRAVING, AND ALLIED SERVICES
SIC 2491	WOOD PRESERVING	SIC 35	MACHINERY, EXCEPT ELECTRICAL
SIC 26	PAPER AND ALLIED PRODUCTS	SIC 36	ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES
SIC 281	INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS (EXCEPT SIC 2818)	SIC 37	TRANSPORTATION EQUIPMENT (EXCEPT SHIP BUILDING AND REPAIRING, SIC 3731)
SIC 2818	INDUSTRIAL ORGANIC CHEMICALS	SIC 3731	SHIP BUILDING AND REPAIRING
SIC 282	PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS	SIC 491	ELECTRIC COMPANIES AND SYSTEMS
SIC 283	DRUGS	SIC 493	COMBINATION COMPANIES AND SYSTEMS
SIC 284	SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS		

PART A

(Note: Submission of Part A is required of all applicants whose processes are listed on page 3 above.)

(Office use only)

Discharge Serial No.
000205-001

INFORMATION REQUIRED OF SPECIFIED INDUSTRIES

Intake		Discharge									
PARAMETER AND CODE	(DAILY AVG. CONCENTRATION) (1)	(DAILY AVG. CONCENTRATION) (2)	MAXIMUM CONCENTRATION (3)	MAXIMUM POUNDS PER DAY (4)	DAILY AVG. CONCENTRATION (5)	AVERAGE POUNDS PER DAY (6)	SAMPLE TYPE (7)	SAMPLE FREQUENCY (8)	METHOD OF ANALYSIS (9)	CONTINUOUS MONITORING (10)	(11)
ALKALINITY (as Ca CO ₃) 00410	140	80	75	6	435	55	319	CONT	DYLY	STD. MTHD.	ABS
B.O.D. 5-DAY 00310	< 10	< 10	< 10	< 1	< 58	< 10	< 58	AVER	DYLY	STD. MTHD.	ABS
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340	13	11	46	4	267	28	162	AVER	DYLY	STD. MTHD.	ABS
TOTAL SOLIDS 00500	270	220	4590	375	26,625	4180	24,247	CONT	DYLY	STD. MTHD.	ABS
TOTAL DISSOLVED SOLIDS 70300	250	220	4590	375	26,625	4176	24,223	CONT	DYLY	STD. MTHD.	ABS
TOTAL SUSPENDED SOLIDS 00530	60	< 2	11	< 1	64	6	35	CONT	DYLY	STD. MTHD.	ABS
TOTAL VOLATILE SOLIDS 00505	160	120	140	11	812	107	621	CONT	DYLY	STD. MTHD.	ABS
AMMONIA (as N) 00610	< 0.2	< 0.2	< 0.2	< 0.02	< 1	< 0.2	< 1	CONT	DYLY	STD. MTHD.	ABS
KJELDAHL NITROGEN 00625	0.5	< 0.2	0.5	0.04	3	0.3	2	CONT	DYLY	STD. MTHD.	ABS
NITRATE (as N) 00620	0.8	0.4	2.8	0.23	16	1.20	7	CONT	DYLY	STD. MTHD.	ABS
PHOSPHORUS TOTAL (as P) 00655	0.08	0.04	0.07	< 0.01	< 1	0.05	< 1	CONT	DYLY	STD. MTHD.	ABS

TABLE A
Guide for Completion of Part A

PARAMETER & UNITS	METHOD	REFERENCES			SIGNIFICANCE IN REPORTING DATA
		STANDARD METHODS 13TH ED. 1971	A.S.T.M. STANDARDS PL 23 1970	W.Q.O. METHODS 1971	
ALKALINITY AS Ca CO ₃ Mg/liter	ELECTROMETRIC TITRATION TECHNICON METHYL ORANGE METHOD	p. 370	p. 154	p. 6	X.
B.O.D. 5-DAY Mg/liter	MODIFIED WINKLER METHOD OR PROBE METHOD	p. 489	p. 712	p. 15	X.
CHEMICAL OXYGEN DEMAND (C.O.D.) Mg/liter	DICHROMATE REFLUX METHOD	p. 495	—	p. 17	X.
TOTAL SOLIDS Mg/liter	GRAVIMETRIC, 105° C. METHOD	p. 535	—	p. 280	X.
TOTAL DISSOLVED (FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 180°C.	p. 539	—	p. 275	X.
TOTAL SUSPENDED (NON-FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 103-105°C.	p. 537	—	p. 278	X.
TOTAL VOLATILE SOLIDS Mg/liter	GRAVIMETRIC METHOD 550°C.	p. 536	—	p. 282	X.
AMMONIA (as N) Mg/liter	DISTILLATION-NESSLERIZATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 453	—	p. 134	.XX
KJELDAHL NITROGEN Mg/liter	DIGESTION-DISTILLATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 469	—	p. 149	.XX
NITRATE (as N) Mg/liter	BRUCINE SULFATE METHOD OR TECHNICON-HYDRAZINE REDUCTION METHOD	p. 461	—	p. 170	.XX
TOTAL PHOSPHORUS (as P) Mg/liter	PERSULFATE DIGESTION & SINGLE REAGENT METHOD OR TECHNICON-MANUAL DIGESTION & SINGLE REAGENT OR STANNOUS CHLORIDE	p. 526	—	p. 235	.XX

PART B DISCHARGE DESCRIPTION

(Note: Submission of Part B is required of all applicants who are also required to submit Part A. Only those parameters specifically indicated in the instructions are to be reported by a particular industry)

(Office use only)

Discharge Serial No.

000205-001

B-1. PHYSICAL AND BIOLOGICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-1)

Intake	Discharge						
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)
COLOR 00080	22	< 5	5		5	DYLY	ABS
SPECIFIC CONDUCTANCE 00095	360	317	6,567	6,200	7,100	DYLY	ABS
TURBIDITY 00070	69	< 10	10		10	DYLY	REC
FECAL STREPTOCOCCI BACTERIA 74054	ND*	ND	ND		ND	0	A
FECAL COLIFORM BACTERIA 74055	ND	ND	ND		ND	0	A
TOTAL COLIFORM BACTERIA 74056	16	ND	ND		ND	0	A

* NOT DETECTABLE

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PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge										
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	METHOD OF ANALYSIS	CONTINUOUS MONITORING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ACIDITY (as CaCO ₃) 00435	W 10	10	2	≤ 1	26	6	17	COMP	DYLY	STD MTHD	ABS
TOTAL ORGANIC CARBON (T.O.C.) 00680	24.7	7.0	26.0	2.1	150.8	15.0	87.0	CONT	"	"	"
TOTAL HARDNESS 00900	116	83	134	11	777	97	563	CONT	"	"	"
NITRITE (as N) 00615	0.01	< 0.01	0.01	< 0.1	< 0.1	0.01	< 0.1	CONT	"	"	"
ORGANIC NITROGEN 00605	W 0.65							COMP	"	"	"
PHOSPHORUS-ORTHO (as P) 70507	W < 0.4	< 0.4	< 0.4	< 0.1	< 2.3	< 0.4	< 2.3	CONT	"	"	"
SULFATE 00945	24.6	27.5	525.7	42.9	3,049	391.6	2,272	CONT	"	"	"
SULFIDE 00745	W < 0.5	< 0.5	< 0.5	< 0.1	< 2.9	< 0.5	< 2.9	CONT	"	"	"
SULFITE 00740	W ≤ 0.1							COMP	"	"	"
BROMIDE 71870	W 0.44							COMP	"	"	"

PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

PARAMETER AND CODE	Intake		Discharge							
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	CONTINUOUS MONITORING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CHLORIDE 00940	75	69	1,314	107	7,622	1,167	6,769	CONT	DYLY	STD MTHD
CYANIDE 00720	^W < 0.1	< 0.1	< 0.1	< 0.01	< 0.58	< 0.1	< 0.58	"	"	"
FLUORIDE 00951	0.30	0.30	1.40	0.11	8.12	1.16	6.73	"	"	"
ALUMINUM-TOTAL 01105	^W 855	215	320	< 1	2	293	2	"	"	"
ANTIMONY-TOTAL 01097	138	122	458	< 1	3	433	3	"	"	"
ARSENIC-TOTAL 01002	23	19	31	< 1	< 1	30	< 1	"	"	"
BARIUM-TOTAL 01007	^W < 10							COMP	"	"
BERYLLIUM-TOTAL 01012	^W < 10							"	"	"
BORON-TOTAL 01022	^W 40							"	"	"
CADMIUM-TOTAL 01027	^W < 50	< 50	< 50	< 0.1	< 0.1	< 50	< 0.1	"	"	"

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PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

PARAMETER AND CODE	Intake					Discharge				
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	METHOD OF ANALYSIS	CONTINUOUS MONITORING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CALCIUM-TOTAL 00916	W 49.3	32.1	25.2	2.1	146.2	23.8	138.1	CONT	DYLYMTHD	STD
CHROMIUM-TOTAL 01034	12	7	74	< 1	< 1	46	< 1	CONT	"	"
COBALT-TOTAL 01037	W < 10							COMP	"	"
COPPER-TOTAL 01042	13	13	32	< 1	< 1	25	< 1	CONT	"	"
IRON-TOTAL 01045	1,133	84	297	< 1	2	271	2	CONT	"	"
LEAD-TOTAL 01051	W < 10	< 10	< 10	< 1	< 1	< 10	< 1	COMP	"	"
MAGNESIUM-TOTAL 00927	W 8	5	6	< 1	34	5	29	CONT	"	"
MANGANESE-TOTAL 01055	W 52	5	10	< 1	< 1	9	< 1	CONT	"	"
MERCURY-TOTAL 71900	W < 0.5	< 0.5	< 0.5			< 0.5		COMP	"	"
MOLYBDENUM-TOTAL 01062	W < 10							COMP	"	"

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PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge										
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	METHOD OF ANALYSIS	SAMPLE FREQUENCY	CONTINUOUS MONITORING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
NICKEL-TOTAL 01067	W 20								COMP	DYLY	STD MTHD
POTASSIUM-TOTAL 00937	W 4.98	4.78	3.23	0.26	18.74	2.98	17.29	CONT	"	"	
SELENIUM-TOTAL 01147	W 40							COMP	"	"	
SILVER-TOTAL 01077	W < 10							COMP	"	"	
SODIUM-TOTAL 00929	24	80	1,682	137	9,757	1,422	8,249	CONT	"	"	
THALLIUM-TOTAL 01059	W < 100							COMP	"	"	
TIN-TOTAL 01102	W < 10							COMP	"	"	
TITANIUM-TOTAL 01152	W < 400	< 400	< 400	< 1	< 2	< 400	< 2	CONT	"	"	
ZINC-TOTAL 01082	39	22	62	< 1	< 1	51	< 1	CONT	"	"	
OIL AND GREASE 00550	A	A	A			A		COMP	"	"	

PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge												
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	METHOD OF ANALYSIS	CONTINUOUS MONITORING		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
PHENOLS 32730	<u>ND*</u>	<u>ND</u>	<u>ND</u>				<u>ND</u>			COMP	DYLY	STD MTHD	ABS
SURFACTANTS 38260	<u>W</u> <u>0.01</u>	<u>ND</u>	<u>ND</u>				<u>ND</u>			"	"	"	"
ALGICIDES* 74051	<u>ND</u>	<u>ND</u>	<u>ND</u>				<u>ND</u>			"	"	"	"
CHLORINATED HYDRO- CARBONS* (EXCEPT PESTICIDES) 74052	<u>ND</u>	<u>ND</u>	<u>ND</u>				<u>ND</u>			"	"	"	"
PESTICIDES* 74053	<u>ND</u>	<u>ND</u>	<u>ND</u>				<u>ND</u>			"	"	"	"

*Name specific compound(s) and fill in the required data for each. Use extra blanks at the end of the form and the "Remarks" space as necessary.

* ND = NOT DETECTABLE.

000453



PART B

(Office use only)

Discharge Serial No.

000205-001

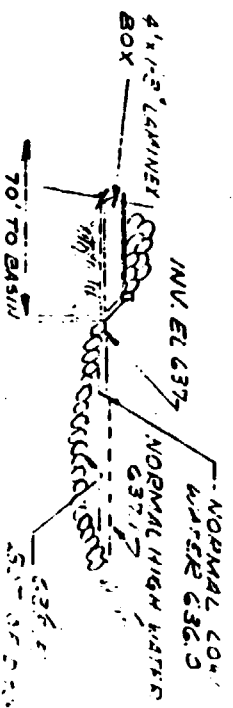
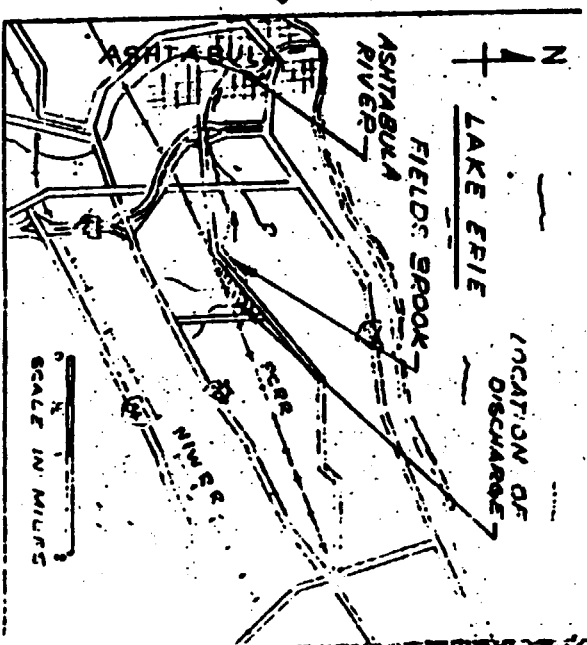
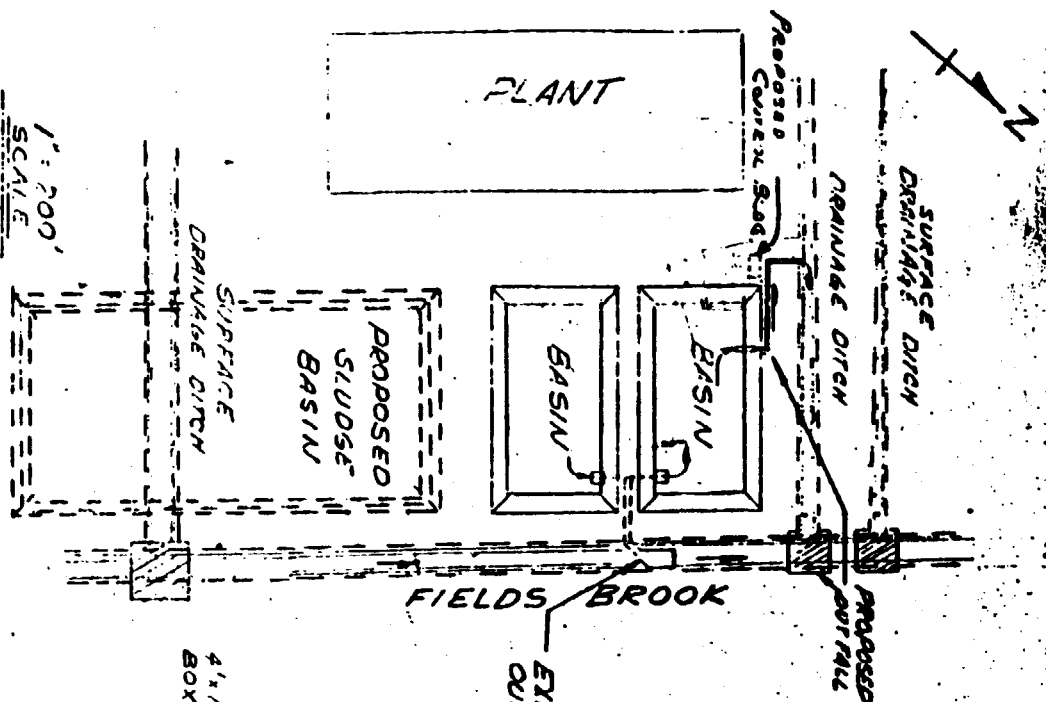
B-3. RADIOACTIVE PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-3)

Intake		Discharge					
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
	(1)	(2)	(1)	(3)	(4)	(5)	(7)
ALPHA-TOTAL 01501	0.36	0.78	6.6			10.0	A
ALPHA COUNTING ERROR 01502	0.40	0.59	4.5			13.5	A
BETA-TOTAL 03501	5.56	4.14	7.26			10.7	A
BETA COUNTING ERROR 03502	0.13	0.62	6.73			10.5	A
GAMMA-TOTAL 05501	7.8	45.2	7.8			7.8	A
GAMMA COUNTING ERROR 05502	0	4.90	=			=	A
TRITIUM-TOTAL 07000 (3)	=	=	=			=	=
TRITIUM COUNTING ERROR 07001	=	=	=			=	=

B-4. REMARKS

- (1) SPOT SAMPLES - ANALYSES FOR THREE DAYS WERE AVERAGED FOR AVERAGE CONCENTRATION, HIGH ANALYSES FOR THREE DAYS WAS HIGH.
- (2) ONE SPOT SAMPLE ANALYZED, NO AVERAGES CONSIDERED.
- (3) DOES NOT APPLY TO OPERATIONS.

000454



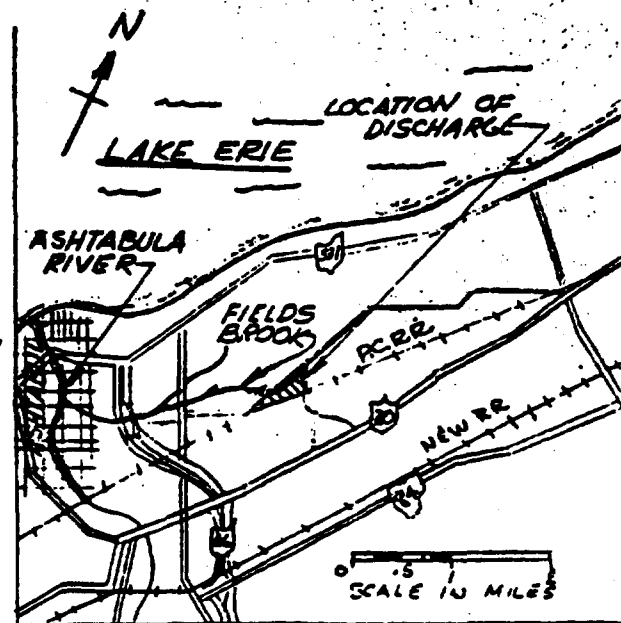
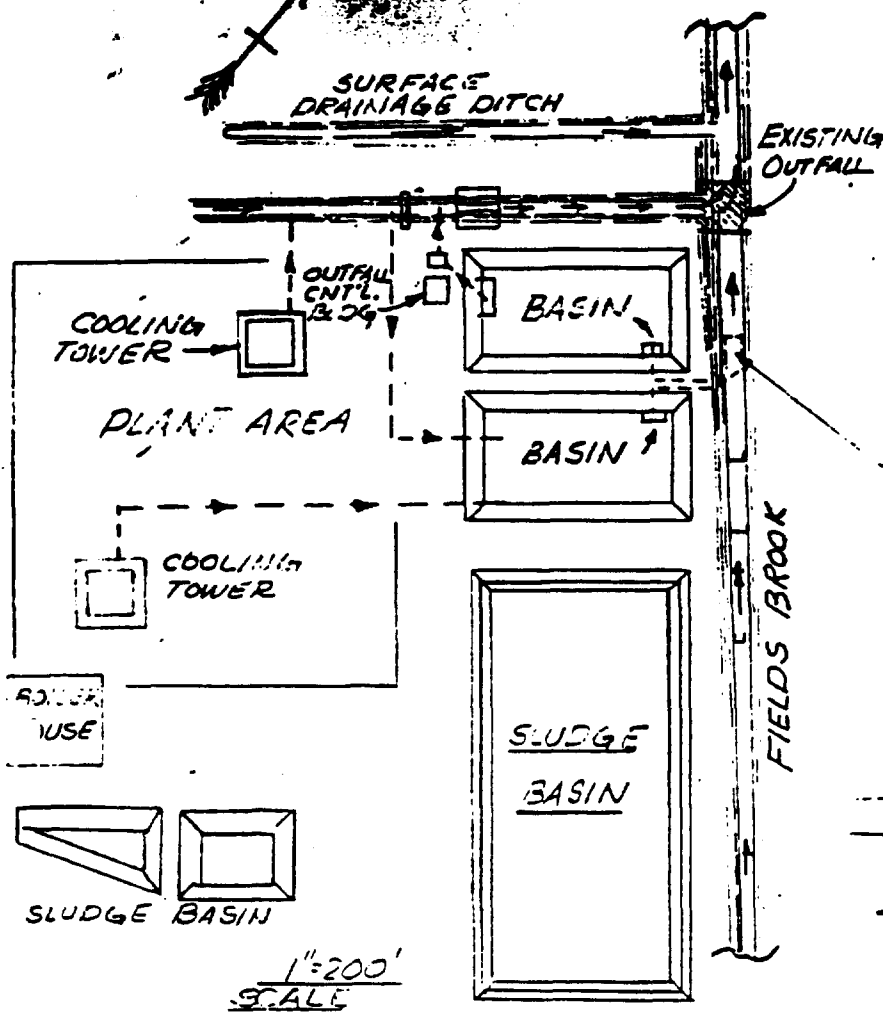
PROFILE OUTFALL

Discharge Location (001)
into FIELDS BROOK

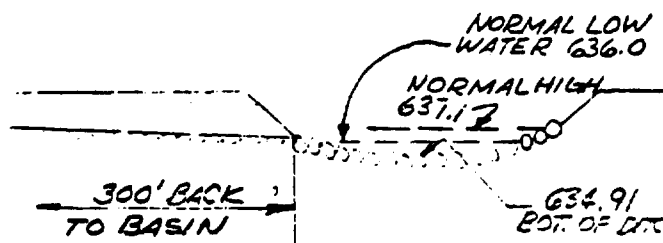
at Ashtabula Plant: Tiltor® Operation,
County of ASHTABULA, State OHIO
Application by SHERWIN-WILLIAMS CHEM. DIV.
SHEET 1 of 4 Date 6-18-71

Still

000455



- FORMER OUTFALL



PROFILE, OUTFALL

SCM

DISCHARGE LOCATION (001)
 INTO: FIELDS BROOK
 AT: ASHTABULA PLANT: TIDOX® OPERATION
 COUNTY of: ASHTABULA , STATE: OHIO
 APPLICATION BY: SHERWIN-WILLIAMS CHEM. DIV.

DATE: 1-5-73

000456

SHERWIN-WILLIAMS CHEMICALS DIV.
P. O. Box No. 310
ASHTABULA, OHIO 44004

ADDENDUM TO REVISED APPLICATION

000205-001

- (1) ORIGINAL APPLICATION, PART A, SECTION 11, PAGE 2 OF 5, ITEM 22, FLOWS, SUCCEEDING CALCULATIONS WERE BASED ON FLOWS PRESENTED IN THE ORIGINAL APPLICATION AS FOLLOWS:

	<u>UNTREATED</u> <u>INTAKE</u> <u>WATER</u>	<u>TREATED</u> <u>INTAKE</u> <u>WATER</u>	<u>AVERAGE</u> <u>(DAILY)</u>	<u>MINIMUM</u> <u>(OPERATING</u> <u>YEAR)</u>	<u>MAXIMUM</u> <u>(OPERATING</u> <u>YEAR)</u>
FLOWS GALLONS PER DAY	1,297,000	745,000	348,000	239,000	432,000

THE REVISED APPLICATION, PART A, SECTION 11, PAGE 2 OF 5, ITEM 22, FLOWS, SUCCEEDING CALCULATIONS ARE BASED ON FLOWS PRESENTED IN THE REVISED APPLICATION.

SCM

000457

<p>5. Date <u>03 25 73</u> <small>mo day yr</small></p>	<p>(Office use only)</p>														
<p>6. Check type of application: a. Original <input type="checkbox"/> b. Revision <input checked="" type="checkbox"/></p>	<p>7. Number of original application 000205</p>														
<p>8. Name of facility where discharge or construction will occur. <u>SHERWIN-WILLIAMS CHEMICALS DIVISION, ASHTABULA PLANT,</u> <u>ASHTABULA TOWNSHIP, ASHTABULA COUNTY, OHIO</u></p>															
<p>9. Full mailing address of facility named in item 8 above. <u>SHERWIN-WILLIAMS CHEMICALS DIVISION</u> <u>P. O. Box No. 310</u> <u>ASHTABULA, OHIO 44004</u></p>															
<p>10. Names and mailing addresses of all adjoining property owners whose property also adjoins the waterway. <u>NEW JERSEY ZINC COMPANY (FORMERLY CABOT TITANIA, INC.)</u> <u>P. O. Box No. 160</u> <u>ASHTABULA, OHIO 44004</u></p>															
<p>11. Check to indicate the nature of the proposed activity: a. Dredging <input type="checkbox"/> b. Construction <input type="checkbox"/> c. Construction with Discharge <input type="checkbox"/> d. Discharge only <input checked="" type="checkbox"/></p>															
<p>12. If activity is temporary in nature, estimate its duration in months. DOES NOT APPLY</p>															
<p>If application is for a discharge:</p>															
<p>13. List intake sources</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Source</th> <th style="text-align: right;">Estimated Volume in Million Gallons Per day or Fraction Thereof</th> </tr> </thead> <tbody> <tr> <td>Municipal or private water supply system</td> <td style="text-align: right;">0 7 9</td> </tr> <tr> <td>Surface water body</td> <td style="text-align: right;">0 — —</td> </tr> <tr> <td>Ground water</td> <td style="text-align: right;">0 — —</td> </tr> <tr> <td>Other (MUNICIPAL)</td> <td style="text-align: right;">0 0 3</td> </tr> </tbody> </table>		Source	Estimated Volume in Million Gallons Per day or Fraction Thereof	Municipal or private water supply system	0 7 9	Surface water body	0 — —	Ground water	0 — —	Other (MUNICIPAL)	0 0 3				
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Municipal or private water supply system	0 7 9														
Surface water body	0 — —														
Ground water	0 — —														
Other (MUNICIPAL)	0 0 3														
<p>14. Describe water usage within the plant</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Type</th> <th style="text-align: right;">Estimated Volume in Million Gallons Per day or Fraction Thereof</th> </tr> </thead> <tbody> <tr> <td>Cooling water</td> <td style="text-align: right;">0 3 2</td> </tr> <tr> <td>Boiler Feed water</td> <td style="text-align: right;">0 1 3</td> </tr> <tr> <td>Process water</td> <td style="text-align: right;">0 3 4</td> </tr> <tr> <td>Sanitary system*</td> <td style="text-align: right;">0 0 3</td> </tr> <tr> <td>Other</td> <td style="text-align: right;">0 — —</td> </tr> </tbody> </table>		Type	Estimated Volume in Million Gallons Per day or Fraction Thereof	Cooling water	0 3 2	Boiler Feed water	0 1 3	Process water	0 3 4	Sanitary system*	0 0 3	Other	0 — —		
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Boiler Feed water	0 1 3														
Process water	0 3 4														
Sanitary system*	0 0 3														
Other	0 — —														
<p>15. List volume of discharges or losses other than into navigable waters.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Type</th> <th style="text-align: right;">Estimated Volume in Million Gallons Per day or Fraction Thereof</th> </tr> </thead> <tbody> <tr> <td>Municipal waste treatment system</td> <td style="text-align: right;">0 0 0</td> </tr> <tr> <td>Surface containment * (RETENTION VOLUME)</td> <td style="text-align: right;">0 4 0</td> </tr> <tr> <td>Underground disposal</td> <td style="text-align: right;">0 0 0</td> </tr> <tr> <td>Waste Acceptance firms</td> <td style="text-align: right;">0 0 1</td> </tr> <tr> <td>Evaporation</td> <td style="text-align: right;">0 1 3</td> </tr> <tr> <td>Consumption (SUM OF WASTE ACCEPTANCE FIRMS AND EVAPORATION)</td> <td style="text-align: right;">0 1 4</td> </tr> </tbody> </table>		Type	Estimated Volume in Million Gallons Per day or Fraction Thereof	Municipal waste treatment system	0 0 0	Surface containment * (RETENTION VOLUME)	0 4 0	Underground disposal	0 0 0	Waste Acceptance firms	0 0 1	Evaporation	0 1 3	Consumption (SUM OF WASTE ACCEPTANCE FIRMS AND EVAPORATION)	0 1 4
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Evaporation	0 1 3														
Consumption (SUM OF WASTE ACCEPTANCE FIRMS AND EVAPORATION)	0 1 4														
<p>* Indicate number employees served per day <u>167</u></p>															
<p>* CONSTANT VOLUME OF WATER RETAINED ON THE PLANT SITE FOR THE PURPOSE OF RECYCLE.</p>															

If structures exist, or dredging, filling or other construction will occur, the precise location of the activity must be described.

(Office use only)

- a. Name the corporate jurisdiction within which the structures exist or the activity will occur.

16. OHIO

17. County ASHTABULA

18. City or Town N/A (ASHTABULA TOWNSHIP)

- b. Name of waterway at the location of the activity

19. FIELD'S BROOK, ASHTABULA RIVER TRIBUTARY

20. Maps and sketches which show the location and character of each structure or activity, including any and all outfall devices, dispersive devices, and non-structural points of discharge, must be attached to this application.

21. For construction or work in navigable waters for which a separate permit is sought under 33 U.S.C. 403, the character of each structure must be fully shown on detailed plans to be submitted with this application. Note on the drawings those structures for which separate discharge information (Section II of this form) has been submitted.

22. List all approvals or denials granted by Federal, interstate, State or local agencies for any structures, construction, discharges or deposits described in this application.

Type of document	Id. No.	Date	Issuing Agency
DISCHARGE PERMIT	2366	2-11-70/	OHIO WATER POLLUTION
TIDOX OPERATION		12-1-70	CONTROL BOARD, OHIO DEPARTMENT OF HEALTH

23. Check if facility existed or was lawfully under construction prior to April 3, 1970.

☒

24. If dredging or filling will occur:

State the type of materials involved, their volume in cubic yards, and the proposed method of measurement.

DOES NOT APPLY.

25. Describe the proposed method of instrumentation which will be used to measure the volume of any solids which may be deposited and to determine its effect upon the waterway.

VOLUMETRIC FLOW IS MEASURED ALONG WITH ANALYTICAL DETERMINATION OF SUSPENDED SOLIDS. SUSPENDED SOLIDS PRESENT IN THE TREATED WASTE DISCHARGE WILL REMAIN IN SUSPENSION TEMPORARILY BUT WILL SETTLE EVENTUALLY.

26. State rates and periods of deposition described in Item 25.

RATE OF DEPOSITION OF SOLIDS WILL BE RECORDED AS POUNDS PER DAY OF TOTAL SUSPENDED SOLIDS. (ESTIMATES NOT TO EXCEED 100 POUNDS PER DAY.) PERIODS OF DEPOSITION WILL BE ON A CONTINUOUS DISCHARGE BASIS FOR ONE MONTH.

000460

SCM

SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is a. Present <input checked="" type="checkbox"/> b. Proposed new or changed <input type="checkbox"/>		2. Implementation schedule <input type="checkbox"/>	(Office use only)
Name of corporation within which the point of discharge is located.		County	City or Town
3. <u>ASHTABULA</u>		4. <u>ASHTABULA</u>	5. <u>N/A (ASHTABULA TOWNSHIP)</u>
State the precise location of the point of discharge. 7. Latitude <u>41</u> Degrees: <u>53</u> Min: <u>41</u> Sec. 8. Longitude <u>80</u> Degrees: <u>45</u> Min: <u>10</u> Sec.		9. Name of waterway at the point of discharge. <u>FIELD'S BROOK, A TRIBUTARY OF THE ASHTABULA RIVER</u>	
10. Has application for water quality certification or description of impact been made? If so, give date: <div style="display: flex; justify-content: space-between;"> <div> Date <u>06</u> <u>09</u> <u>71</u> mo day yr </div> <div> Check if certificate is attached to form <input type="checkbox"/> </div> <div> Name Issuing Agency _____ </div> </div>			
11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process). <u>SIC 281 GENERAL PROCESS: MANUFACTURER OF INORGANIC CHEMICALS</u> <u>SIC 2816 SPECIFIC PROCESS: MANUFACTURER OF TITANIUM DIOXIDE PIGMENTS (TIDOX(R))</u>			
12. Standard industrial classification number. <u>SIC 2816</u>		13. Principal product. <u>TITANIUM DIOXIDE PIGMENTS</u>	
15. Principal raw material. <u>SEE ITEMS 13 AND 14</u>		16. Amount of principal raw material consumed per day. <u>SEE ITEMS 13 AND 14</u>	
18. Average gallons per batch discharge. <u>SEE ITEM 17</u>		19. Date discharge began. <u>09</u> <u>01</u> <u>69</u> mo day yr	
20. Date discharge will begin. <u>SEE ITEM 19</u>		14. Amount of principal product produced per day. <u>AVERAGE 71.0 TONS PER DAY</u>	
17. Number of batch discharges per day. <u>CONTINUOUS DISCHARGE</u>		21. Describe waste abatement practices. <p>PROCESS EFFLUENTS FROM THE TIDOX(R) OPERATION ARE COLLECTED IN ACID BRICK TRENCHES AND ROUTED TO A CENTRAL MIXING BASIN. SODIUM HYDROXIDE IS ADDED TO AGITATED MIXING BASIN TO NEUTRALIZE. OTHER DISCHARGES ARE COLLECTED IN DITCH AND PUMPED TO THE SAME AGITATED BASIN FOR NEUTRALIZATION. NEUTRALIZED WATER OVERFLOWING THE BASIN FLOWS THROUGH TWO RETENTION BASINS IN SERIES (CAPACITY 800,000 GALLONS EACH) WHERE THE WATER IS CLARIFIED BY SEDIMENTATION. OUTFALL FROM THE RETENTION POND FLOWS INTO FIELD'S BROOK WITH CONTINUOUS INSTRUMENT MONITORING OF FLOW TEMPERATURE, DISSOLVED OXYGEN, TURBIDITY AND CONDUCTIVITY AT EIGHT HOUR INTERVALS, LABORATORY PERSONNEL ANALYZE FOR SUSPENDED SOLIDS AND PH AS A CHECK.</p> <p><u>ESEPAR, ESEGRE, DREACT, DHYSIC, RECYCL, CNEUT, PSEDIM, CNEUTR, SLAGOO, SLANDD, TPROCE</u></p>	

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

APPLICATION FOR PERMIT TO DISCHARGE OR WORK IN NAVIGABLE WATERS AND THEIR TRIBUTARIES

SECTION I. GENERAL INFORMATION

1. State	Application Number (to be assigned by Corps of Engineers)			
O H	---	---	---	---
	Div.	Dist.	Type	Sequence No.

2. Name of applicant and title of signing official THE SHERWIN-WILLIAMS COMPANY; GROUP VICE PRESIDENT,
CHEMICALS, G. F. SCHLAUDECKER

3. Mailing address of applicant THE SHERWIN-WILLIAMS COMPANY
101 PROSPECT AVE., N.W.
P. O. Box No. 6027
CLEVELAND, OHIO 44101

4. Name, address, telephone number and title of applicant's authorized agent for permit application coordination and correspondence.
G. F. WYMAN, PLANT MANAGER
SHERWIN-WILLIAMS CHEMICALS DIVISION
P. O. Box No. 310
ASHTABULA, OHIO 44004
PHONE: 216-998-1825

NOTE TO APPLICANT: Refer to the pamphlet entitled "Permits for Work and Structures in and for Discharges or Deposits into Navigable Waters" before attempting to complete this form.

Required Information

- All information contained in this application will, upon request, be made available to the public for inspection and copying. A separate sheet entitled "Confidential Answers" must be used to set out information which is considered by the applicant to constitute trade secrets or commercial or financial information of a confidential nature. The information must clearly indicate the item number to which it applies. Confidential treatment can be considered only for that information for which a specific written request of confidentiality has been made on the attached sheet. However, in no event will identification of the contents and frequency of a discharge be recognized as confidential or privileged information.
- The applicant shall furnish such supplementary information as is required by the District Engineer in order to evaluate fully an application.
- If additional space is needed for a complete response to any item on this form, attach a sheet entitled "Additional Information." Indicate on that sheet the item numbers to which answers apply.
- Drawings required by items 20 and 21 should be attached to this application. Other papers which must be attached to this application include, if applicable, copies of a water quality certification or a written communication which describes water quality impact (see Item 22 and Item 10 of Section II, below), the additional information sheet(s) in "c" above, and the confidential information sheet described in "a" above.

Fees

If any discharge or deposit is involved, an application fee of \$100 must be submitted with this application. An additional \$50 is required for each additional point of discharge or deposit.

Signature

- If a discharge is involved, an application submitted by a corporation must be signed by the principal executive officer of that corporation or by an official of the rank of corporate vice president or above who reports directly to such principal executive officer and who has been designated by the principal executive officer to make such applications on behalf of the corporation. In the case of a partnership or a sole proprietorship, the application must be signed by a general partner or the proprietor. Other signature requirements are discussed in the pamphlet.
- If no discharge is involved, an application may be signed by the applicant or his authorized agent.

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate.

18 U.S.C. Section 1001 provides that:

Signature of Applicant
G. F. SCHLAUDECKER, GROUP VICE PRESIDENT

Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

FOR CORPS OF ENGINEERS USE ONLY

Acronym name of applicant

Are discharge structures

Major? ☒ Minor? ☐ N/A? ☐

Date received, form not complete

Date received, form complete
but without certificate

Date received, form complete

Date of Cert./Ltr.

Date sent to EPA, form not complete

Date sent to EPA, NOAA, D/I, AEC,

FPC in complete form

day mo yr

day mo yr

14. all known hazardous or potentially hazardous substances in your plant been inventoried?



Yes



No

24b. If yes, have steps been taken to insure that there exists no possibility of any such known hazardous or potentially hazardous substance entering this discharge?



Yes



No

25. Remarks.

PART A, COL. 4, BASIS OF THE CALCULATION WAS 71 TONS PER DAY OF
TITANIUM DIOXIDE PIGMENTS.

The information above completes the basic reporting requirements which are required of all applicants. Those applicants whose discharge results for an activity included within any of the Standard Industrial Classification Code (SIC Code) categories listed below must complete Part A of this form well.

CRITICAL INDUSTRIAL GROUPS

SIC 098	FISH HATCHERIES, FARMS, AND PRESERVES	SIC 285	PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS
SIC 10-14	DIVISION B - MINING	SIC 2871	FERTILIZERS
SIC 201	MEAT PRODUCTS	SIC 2879	AGRICULTURAL PESTICIDES, AND OTHER AGRICULTURAL CHEMICALS, NOT ELSEWHERE CLASSIFIED
SIC 202	DAIRY PRODUCTS	SIC 2891	ADHESIVES AND GELATIN
SIC 203	CANNED PRESERVED FRUITS, VEGETABLES (EXCEPT SEAFOODS, SIC 2031 AND 2036)	SIC 2892	EXPLOSIVES
SIC 2031, 2036	CANNED AND CURED FISH AND SEAFOODS; FRESH OR FROZEN PACKAGED FISH AND SEAFOODS	SIC 29	PETROLEUM REFINING AND RELATED INDUSTRIES
SIC 204	GRAIN MILL PRODUCTS	SIC 3011, 3069	TIRES AND INNER TUBES; FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED
SIC 206	SUGAR	SIC 3079	MISCELLANEOUS PLASTICS PRODUCTS
SIC 207	CONFECTIONARY AND RELATED PRODUCTS	SIC 311	LEATHER TANNING AND FINISHING
SIC 208	BEVERAGES	SIC 32	STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
SIC 209	MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS	SIC 331	BLAST FURNACES, STEEL WORKS, AND ROLLING AND FINISHING MILLS
SIC 22	TEXTILE MILL PRODUCTS	SIC 332	IRON AND STEEL FOUNDRIES
SIC 23	APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS	SIC 333, 334	PRIMARY SMELTING AND REFINING OF NON-FERROUS METALS; SECONDARY SMELTING AND REFINING OF NONFERROUS METALS
SIC 242	SAWMILLS AND PLANING MILLS	SIC 336	NONFERROUS FOUNDRIES
SIC 2432	VENEER AND PLYWOOD	SIC 347	COATING, ENGRAVING, AND ALLIED SERVICE
SIC 2491	WOOD PRESERVING	SIC 35	MACHINERY, EXCEPT ELECTRICAL
SIC 26	PAPER AND ALLIED PRODUCTS	SIC 36	ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES
SIC 281	INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS (EXCEPT SIC 2818)	SIC 37	TRANSPORTATION EQUIPMENT (EXCEPT SHIP BUILDING AND REPAIRING, SIC 3731)
SIC 2818	INDUSTRIAL ORGANIC CHEMICALS	SIC 3731	SHIP BUILDING AND REPAIRING
SIC 282	PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS	SIC 491	ELECTRIC COMPANIES AND SYSTEMS
SIC 283	DRUGS	SIC 493	COMBINATION COMPANIES AND SYSTEMS
SIC 284	SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS		

22.

PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Intake		Discharge		(Office use only)			
Parameter and (Code)	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY) (1)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CINTINUOUS MONITORING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Flow (Gallons per day) 00056	792,509	792,509	695,520	388,800	864,000	DYLY	REC
pH 00400	8.1	9.5	7.1	6.5	8.0	"	REC
Temperature (Winter) (°F) 74028	46	46	74	59	75	"	REC
Temperature (Summer) (°F) 74027	75	75	89	75	109	"	REC

Discharge Serial No.
000205-001

23.

DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT
Color 00080	X		Aluminum 01105	X		Nickel 01067	?
Turbidity 00070	X		Antimony 01097	?		Selenium 01147	?
Radioactivity 74050	?		Arsenic 01002	?		Silver 01077	?
Hardness 00900	X		Beryllium 01012	?		Potassium 00937	X
Solids 00500	X		Barium 01007	?		Sodium 00929	X
Ammonia 00610	X		Boron 01022	?		Titanium 01152	X
Organic Nitrogen 00605	X		Cadmium 01027	?		Tin 01102	?
Nitrate 00620	X		Calcium 00916	X		Zinc 01092	?
Nitrite 00615	?		Cobalt 01037	?		Algicides 74051	
Phosphorus 00665	X		Chromium 01034	?		Oil and Grease 00550	
Sulfate 00945	X		Copper 01042	?		Phenols 32730	
Sulfide 00745	?		Iron 01045	?		Surfactants 38260	?
Sulfite 00740	?		Lead 01051	?		Chlorinated Hydrocarbons 74052	?
Bromide 71870	?		Magnesium 00927	?		Pesticides 74053	X
Chloride 00940	X		Manganese 01055	?		Fecal Streptococci Bacteria 74054	?
Cyanide 00720	?		Mercury 71900	?		Coliform Bacteria 74056	?
Fluoride 00951	?		Molybdenum 01062	?			

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000462

PART A

(Note: Submission of Part A is required of all applicants whose processes are listed on page 3 above.)

(Office use only)

Discharge Serial No.
000205-001

INFORMATION REQUIRED OF SPECIFIED INDUSTRIES

Intake		Discharge									
PARAMETER AND CODE	DAILY AVG. CONCENTRATION (1)	TREATED INTAKE WATER MAXIMUM CONCENTRATION (2)	MAXIMUM CONCENTRATION PER PROCESS UNIT (3)	MAXIMUM POUNDS PER DAY (4)	DAILY AVG. CONCENTRATION (5)	AVERAGE POUNDS PER DAY (6)	SAMPLE TYPE (7)	SAMPLE FREQUENCY (8)	METHOD OF ANALYSIS (9)	CONTINUOUS MONITORING (10)	(11)
ALKALINITY (as Ca CO ₃) 00410	140	80	75	6	435	55	319	CONT	DYLY	STD. MTHD.	ABS
B.O.D. 5-DAY 00310	< 10	< 10	< 10	< 1	< 58	< 10	< 58	AVER	DYLY	STD. MTHD.	ABS
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340	13	11	46	4	267	28	162	AVER	DYLY	STD. MTHD.	ABS
TOTAL SOLIDS 00500	270	220	4590	375	26,625	4180	24,247	CONT	DYLY	STD. MTHD.	ABS
TOTAL DISSOLVED SOLIDS 70300	250	220	4590	375	26,625	4176	24,223	CONT	DYLY	STD. MTHD.	ABS
TOTAL SUSPENDED SOLIDS 00530	60	< 2	11	< 1	64	6	35	CONT	DYLY	STD. MTHD.	ABS
TOTAL VOLATILE SOLIDS 00505	160	120	140	11	812	107	621	CONT	DYLY	STD. MTHD.	ABS
AMMONIA (as N) 00610	< 0.2	< 0.2	< 0.2	< 0.02	< 1	< 0.2	< 1	CONT	DYLY	STD. MTHD.	ABS
KJELDAHL NITROGEN 00625	0.5	< 0.2	0.5	0.04	3	0.3	2	CONT	DYLY	STD. MTHD.	ABS
NITRATE (as N) 00620	0.8	0.4	2.8	0.23	16	1.20	7	CONT	DYLY	STD. MTHD.	ABS
PHOSPHORUS TOTAL (as P) 00665	0.08	0.04	0.07	< 0.01	< 1	0.05	< 1	CONT	DYLY	STD. MTHD.	ABS

TABLE A
Guide for Completion of Part A

PARAMETER & UNITS	METHOD	REFERENCES			SIGNIFICANCE IN REPORTING DATA
		STANDARD METHODS 13TH ED. 1971	A.S.T.M. STANDARDS PL. 23 1970	W.Q.O. METHODS 1971	
ALKALINITY AS Ca CO ₃ Mg/liter	ELECTROMETRIC TITRATION TECHNICON METHYL ORANGE METHOD	p. 370	p. 154	p. 6	X.
B.O.D. 5-DAY Mg/liter	MODIFIED WINKLER METHOD OR PROBE METHOD	p. 489	p. 712	p. 15	X.
CHEMICAL OXYGEN DEMAND (C.O.D.) Mg/liter	DICHROMATE REFLUX METHOD	p. 495	—	p. 17	X.
TOTAL SOLIDS Mg/liter	GRAVIMETRIC, 105°C. METHOD	p. 535	—	p. 280	X.
TOTAL DISSOLVED (FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 180°C.	p. 539	—	p. 275	X.
TOTAL SUSPENDED (NON-FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 103-105°C.	p. 537	—	p. 278	X.
TOTAL VOLATILE SOLIDS Mg/liter	GRAVIMETRIC METHOD 550°C.	p. 536	—	p. 282	X.
AMMONIA (as N) Mg/liter	DISTILLATION-NESSLERIZATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 453	—	p. 134	XX
KJELDAHL NITROGEN Mg/liter	DIGESTION-DISTILLATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 469	—	p. 149	XX
NITRATE (as N) Mg/liter	BRUCINE SULFATE METHOD OR TECHNICON-HYDRAZINE REDUCTION METHOD	p. 461	—	p. 170	XX
TOTAL PHOSPHORUS (as P) Mg/liter	PERSULFATE DIGESTION & SINGLE REAGENT METHOD OR TECHNICON-MANUAL DIGESTION & SINGLE REAGENT OR STANNOUS CHLORIDE	p. 526	—	p. 235	XX

PART B DISCHARGE DESCRIPTION

(Note: Submission of Part B is required of all applicants who are also required to submit Part A. Only those parameters specifically indicated in the instructions are to be reported by a particular industry)

(Office use only)

Discharge Serial No.
000205-001

B-1. PHYSICAL AND BIOLOGICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-1)

Intake	Discharge						
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY) (OPERATING YEAR)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)
COLOR 00080	22	< 5	5		5	DYLY	ABS
SPECIFIC CONDUCTANCE 00095	360	317	6,567	6,200	7,100	DYLY	ABS
TURBIDITY 00070	69	< 10	10		10	DYLY	REC
FECAL STREPTOCOCCI BACTERIA 74054	ND*	ND	ND		ND	0	A
FECAL COLIFORM BACTERIA 74055	ND	ND	ND		ND	0	A
TOTAL COLIFORM BACTERIA 74056	16	ND	ND		ND	0	A

* NOT DETECTABLE

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000-006

PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge										
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	METHOD OF ANALYSIS	CONTINUOUS MONITORING
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ACIDITY (as CaCO ₃) 00435	W 10	10	9	< 1	26	6	17	COMP	DYLY	STD MTHD	ABS
TOTAL ORGANIC CARBON (T.O.C.) 00680	24.7	7.0	26.0	2.1	150.8	15.0	87.0	CONT	"	"	"
TOTAL HARDNESS 00900	116	83	134	11	777	97	563	CONT	"	"	"
NITRITE (as N) 00615	0.01	< 0.01	0.01	< 0.1	< 0.1	0.01	< 0.1	CONT	"	"	"
ORGANIC NITROGEN 00605	W 0.65							COMP	"	"	"
PHOSPHORUS-ORTHO (as P) 70507	< 0.4	< 0.4	< 0.4	< 0.1	< 2.3	< 0.4	< 2.3	CONT	"	"	"
SULFATE 00945	24.6	27.5	525.7	42.9	3,049	391.6	2,272	CONT	"	"	"
SULFIDE 00745	< 0.5	< 0.5	< 0.5	< 0.1	< 2.9	< 0.5	< 2.9	CONT	"	"	"
SULFITE 00740	W < 0.1							COMP	"	"	"
BROMIDE 71870	W 0.44							COMP	"	"	"

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PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge									
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	METHOD OF ANALYSIS	CONTINUOUS MONITORING
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CHLORIDE 00940	75	69	1,314	107	7,622	1,167	6,769	CONT	DYLY	STD MTHD
CYANIDE 00720	W < 0.1	< 0.1	< 0.1	< 0.01	< 0.58	< 0.1	< 0.58	"	"	"
FLUORIDE 00951	0.30	0.30	1.40	0.11	8.12	1.16	6.73	"	"	"
ALUMINUM-TOTAL 01105	W 855	215	320	< 1	2	293	2	"	"	"
ANTIMONY-TOTAL 01097	138	122	458	< 1	3	433	3	"	"	"
ARSENIC-TOTAL 01002	23	19	31	< 1	< 1	30	< 1	"	"	"
BARIUM-TOTAL 01007	W < 10							COMP	"	"
BERYLLIUM-TOTAL 01012	W < 10							"	"	"
BORON-TOTAL 01022	W 40							"	"	"
CADMIUM-TOTAL 01027	W < 50	< 50	< 50	< 0.1	< 0.1	< 50	< 0.1	"	"	"

PART B

(Office use only)

Discharge Serial No.
000205-001

B-2. (cont.)

CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge									
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	CONTINUOUS MONITORING
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CALCIUM-TOTAL 00916	W 49.3	32.1	25.2	2.1	146.2	23.8	138.1	CONT	DYLYMTHD	STD A
CHROMIUM-TOTAL 01034	12	7	74	< 1	< 1	46	< 1	CONT	"	"
COBALT-TOTAL 01037	W < 10							COMP	"	"
COPPER-TOTAL 01042	13	13	32	< 1	< 1	25	< 1	CONT	"	"
IRON-TOTAL 01045	1,133	84	297	< 1	2	271	2	CONT	"	"
LEAD-TOTAL 01051	W ≤ 10	≤ 10	≤ 10	< 1	< 1	≤ 10	≤ 1	COMP	"	"
MAGNESIUM-TOTAL 00927	W 8	5	6	< 1	34	5	29	CONT	"	"
MANGANESE-TOTAL 01055	W 52	5	10	< 1	< 1	9	< 1	CONT	"	"
MERCURY-TOTAL 71900	W < 0.5	< 0.5	< 0.5			< 0.5		COMP	"	"
MOLYBDENUM-TOTAL 01062	W < 10							COMP	"	"

PART B

(Office use only)

Discharge Permit No.
000205-001

B-2. (cont.)

CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake		Discharge										
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	METHOD OF ANALYSIS	CONTINUOUS MONITORING	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
NICKEL-TOTAL 01067	W 20								COMP	DYLY	STD MTHD	AE
POTASSIUM-TOTAL 00937	W 4.98	4.78	3.23	0.26	18.74	2.98	17.29		CONT	"	"	"
SELENIUM-TOTAL 01147	W 40								COMP	"	"	"
SILVER-TOTAL 01077	W 10								COMP	"	"	"
SODIUM-TOTAL 00929	24	80	1,682	137	9,757	1,422	8,249		CONT	"	"	"
THALLIUM-TOTAL 01059	W 100								COMP	"	"	"
TIN-TOTAL 01102	W 10								COMP	"	"	"
TITANIUM-TOTAL 01152	W 400	400	400	1	2	400	2		CONT	"	"	"
ZINC-TOTAL 01092	39	22	62	1	1	51	1		CONT	"	"	"
OIL AND GREASE 00550	A	A	A	SCM			A		COMP	"	"	"

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PART B

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Discharge Serial No.
000205-001

B-2. (cont.)

CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge												
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	METHOD OF ANALYSIS	CONTINUOUS MONITORING		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
PHENOLS 32730	ND*	ND	ND				ND			COMP	DYLY	STD MTHD	ABS
SURFACTANTS 38260	W 0.01	ND	ND				ND			"	"	"	"
ALGICIDES* 74051	ND	ND	ND				ND			"	"	"	"
CHLORINATED HYDRO- CARBONS* (EXCEPT PESTICIDES) 74052	ND	ND	ND				ND			"	"	"	"
PESTICIDES* 74053	ND	ND	ND				ND			"	"	"	"

*Name specific compound(s) and fill in the required data for each. Use extra blanks at the end of the form and the "Remarks" space as necessary.

* ND = NOT DETECTABLE.

000471

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PART B

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Discharge Serial No.
000205-001

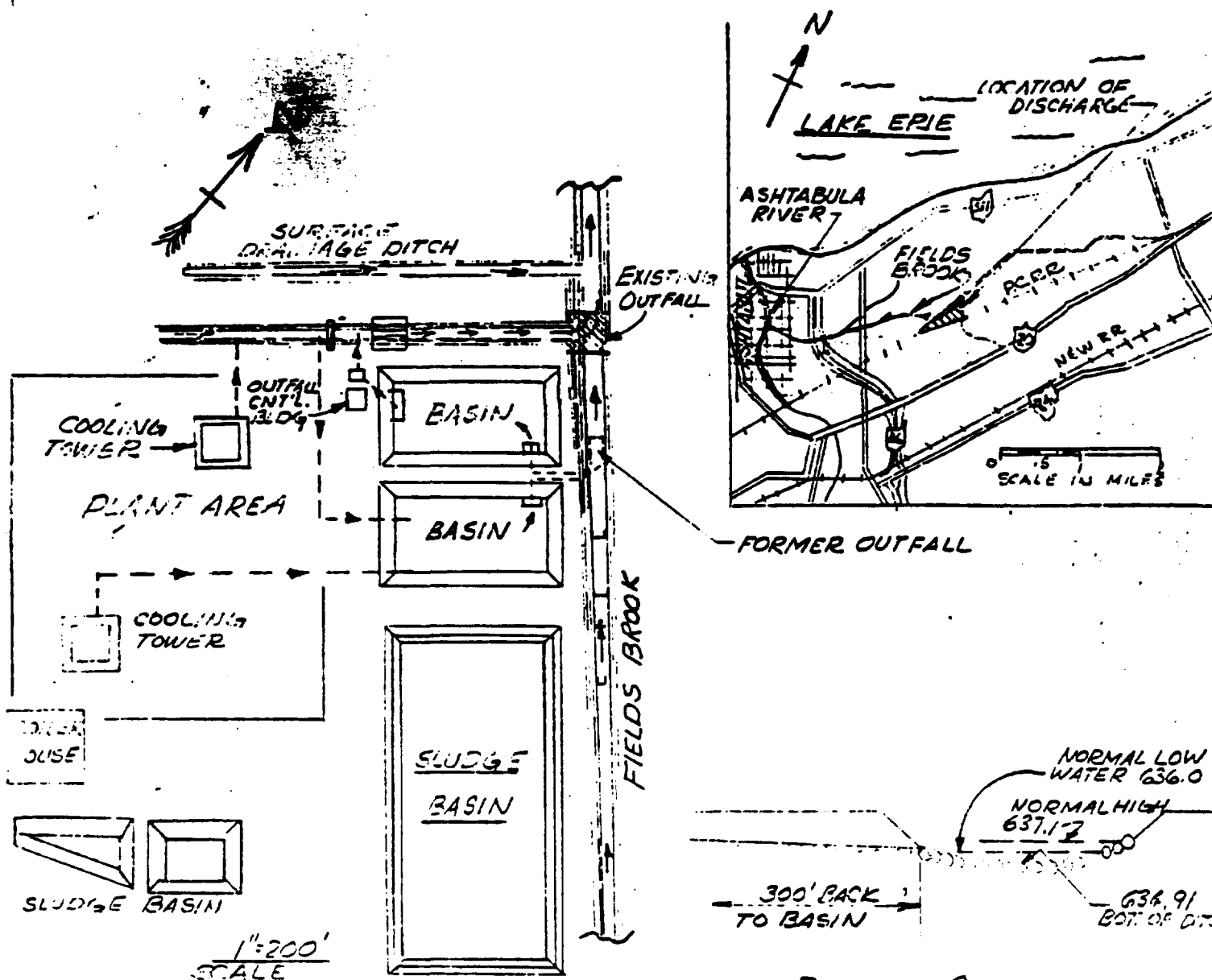
B-3. RADIOACTIVE PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-3)

Intake		Discharge					
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
	(1)	(2)	(1)	(4)	(5)	(6)	(7)
ALPHA-TOTAL 01501	0.36	0.78	6.6		10.0	0	A
ALPHA COUNTING ERROR 01502	0.40	0.59	4.5		13.5	0	A
BETA-TOTAL 03501	5.56	4.14	7.26		10.7	0	A
BETA COUNTING ERROR 03502	0.13	0.62	6.73		10.5	0	A
GAMMA-TOTAL 05501	7.8	45.2	7.8		7.8	0	A
GAMMA COUNTING ERROR 05502	0	4.90	=		=	0	A
TRITIUM-TOTAL 07000 (3)	=	=	=		=	=	=
TRITIUM COUNTING ERROR 07001	=	=	=		=	=	=

B-4. REMARKS

- (1) SPOT SAMPLES - ANALYSES FOR THREE DAYS WERE AVERAGED FOR AVERAGE CONCENTRATION, HIGH ANALYSES FOR THREE DAYS WAS HIGH.
- (2) ONE SPOT SAMPLE ANALYZED, NO AVERAGES CONSIDERED.
- (3) DOES NOT APPLY TO OPERATIONS.

000472



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DISCHARGE LOCATION (001)
 INTO: FIELDS BROOK
 AT: ASHTABULA PLANT: TIDOX OPERATION
 COUNTY of: ASHTABULA, STATE: OHIO
 APPLICATION BY: SHERWIN-WILLIAMS CHEM. DIV.

DATE: 1-1-77

000473

SHERWIN-WILLIAMS CHEMICALS DIV.
P. O. Box No. 310
ASHTABULA, OHIO 44004

ADDENDUM TO REVISED APPLICATION

000205-001

- (1) ORIGINAL APPLICATION, PART A, SECTION 11, PAGE 2 OF 5, ITEM 22, FLows, SUCCEEDING CALCULATIONS WERE BASED ON FLOWS PRESENTED IN THE ORIGINAL APPLICATION AS FOLLOWS:

	<u>UNTREATED INTAKE WATER</u>	<u>TREATED INTAKE WATER</u>	<u>AVERAGE (DAILY)</u>	<u>MINIMUM (OPERATING YEAR)</u>	<u>MAXIMUM (OPERATING YEAR)</u>
FLOWS GALLONS PER DAY	1,297,000	745,000	348,000	239,000	432,000

THE REVISED APPLICATION, PART A, SECTION 11, PAGE 2 OF 5, ITEM 22, FLOWS, SUCCEEDING CALCULATIONS ARE BASED ON FLOWS PRESENTED IN THE REVISED APPLICATION.

SCM

000474

G. F. WYMAN



File
N.P.D.E.S.
permit

P. O. Box 310
2900 Middle Road
Ashtabula, Ohio 44004
Phone: 216-998-1825

JULY 16, 1973

MR. JOHN R. KELLY, P.E.
U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION V
ONE, NORTH WACKER DRIVE
CHICAGO, ILLINOIS 60606

REFERENCE: (1) ASHTABULA PLANT
SHERWIN-WILLIAMS CHEMICAL DIVISION
THE SHERWIN-WILLIAMS COMPANY
P. O. Box 310
ASHTABULA, OHIO 44004

N.P.D.E.S. APPLICATION
No. OH 070 OXO 000205

(2) MEETING, JULY 5, 1973
REPRESENTATIVES OF THE U.S.E.P.A.
AND THE SHERWIN-WILLIAMS COMPANY

TOPIC: ADDITIONAL INFORMATION FOR PARAMETER
LIMITS, EFFLUENT TREATED WASTE WATER

PRESENT: U.S.E.P.A.:

G. A. AMENDOLA, OHIO DISTRICT

J. R. KELLY, P.E., REGION V

R. D. LUSS, ATTORNEY AT LAW, REGION V

STASYS V. RASTONIS, PHYSICAL SCIENTIST, REGION V

THE SHERWIN-WILLIAMS COMPANY:

C. G. BRETZ, ATTORNEY AT LAW,
THE SHERWIN-WILLIAMS COMPANY

C. R. SADLER, SUPERVISOR, ENGINEERING SERVICES,
THE SHERWIN-WILLIAMS CHEMICALS DIVISION

A. C. THOMAS, ASSISTANT DIRECTOR, ENVIRONMENTAL
CONTROL, THE SHERWIN-WILLIAMS COMPANY

DEAR MR. KELLY:

ON JULY 10, 1973, REQUESTED LIMITATIONS WERE VERBALLY TRANSMITTED BY PHONE
TO STASYS V. RASTONIS, AND WERE AS FOLLOWS:

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000475

PARAMETERS	DISCHARGE LIMITATIONS POUNDS PER DAY		OTHER LIMITATIONS MILLIGRAMS PER LITER	
	DAILY AVERAGE	DAILY MAXIMUM	AVERAGE	MAXIMUM
TOTAL SUSPENDED SOLIDS	40	75	8.0	17.0
TOTAL DISSOLVED SOLIDS	31,000	38,000	5,000	5,700
TOTAL CHROMIUM	0.3	0.6	0.06	0.10
COPPER	0.3	0.6	0.06	0.10
ZINC	0.3	0.6	0.06	0.10

BASES FOR THESE REQUESTS WERE CALCULATIONS ASSUMING THE DATA FOR EACH PARAMETER FITTED A NORMAL STATISTICAL DISTRIBUTION.

TABLE 1 SHOWED THE TABULATED DATA FOR 38 DAYS OF ANALYSIS OF THE EFFLUENT DISCHARGE FOR TOTAL SUSPENDED SOLIDS AND TOTAL DISSOLVED SOLIDS FROM AUGUST 21, 1972 THROUGH MAY 29, 1973.

1. EFFLUENT FLOW

BASIC TO ALL CALCULATIONS WAS A FLOW COMPUTATION. TOTAL FLOW DATA, FROM ABOVE-REFERENCED PERIOD, WAS PLOTTED ON NORMAL PROBABILITY PAPER, FIGURE 1. MEAN FLOW EQUALED 463 GALLONS PER MINUTE (666,720 GALLONS PER DAY) AND AT PLUS ONE STANDARD DEVIATION, 597 GALLONS PER MINUTE (859,680 GALLONS PER DAY). AT THE UPPER 95% CONFIDENCE LIMIT, THE FLOW WAS 710 GALLONS PER MINUTE (1,022,400 GALLONS PER DAY).

2. DISCHARGES: TOTAL SUSPENDED SOLIDS

CONCENTRATION OF TOTAL SUSPENDED SOLIDS WAS PLOTTED ON NORMAL PROBABILITY PAPER, FIGURE 2. THE MEAN WAS 3.7 MILLIGRAMS PER LITER AND AT PLUS ONE STANDARD DEVIATION, 7.0 MILLIGRAMS PER LITER. TO FORECAST THE LIMITS, THE CONCENTRATION, 7.0 MILLIGRAMS PER LITER, WAS USED WITH THE MEAN FLOW, 463 GALLONS PER MINUTE, FOR AVERAGE POUNDS PER DAY, AND A ONE-DAY EXPERIENCED MAXIMUM FLOW, 890 GALLONS PER MINUTE (1,231,600 GALLONS PER DAY) TABLE 1, NO. 38 WITH 7.0 MILLIGRAMS PER LITER WAS USED TO CALCULATE THE ONE-DAY MAXIMUM OF POUNDS PER DAY. SEE TABLE 2.

3. DISCHARGES: TOTAL DISSOLVED SOLIDS

CONCENTRATION OF TOTAL DISSOLVED SOLIDS WAS PLOTTED ON PROBABILITY PAPER, FIGURE 3. THE MEAN WAS 4,350 MILLIGRAMS PER LITER. TO FORECAST THE LIMITS FOR TOTAL DISSOLVED SOLIDS, THE AVERAGE CONCENTRATION, 4,350 MILLIGRAMS, WAS USED WITH 597 GALLONS PER MINUTE (859,680 GALLONS PER DAY) EQUAL TO THE MEAN FLOW PLUS ONE STANDARD DEVIATION TO CALCULATE THE AVERAGE POUNDS PER DAY, RESULTS SEE TABLE 2.

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FOR THE ONE-DAY MAXIMUM OF POUNDS PER DAY, TOTAL DISSOLVED SOLIDS, THE UPPER 95% CONFIDENCE LIMIT, 710 GALLONS PER MINUTE (1,022,400 GALLONS PER DAY), AND THE MEAN CONCENTRATION, 4,350 MILLIGRAMS PER LITER, WERE USED TO CALCULATE THE MAXIMUM POUNDS PER DAY, SEE TABLE 2.

4. CONCENTRATIONS: TOTAL SUSPENDED AND TOTAL DISSOLVED SOLIDS

FOR TOTAL SUSPENDED SOLIDS, THE REQUESTED AVERAGE CONCENTRATION, 8.0 MILLIGRAMS PER LITER, WAS APPROXIMATELY EQUAL TO THE AVERAGE PLUS A STANDARD DEVIATION, SEE FIGURE 2. THE MAXIMUM CONCENTRATION, 17 MILLIGRAMS PER LITER, WAS REQUESTED BECAUSE OF THE MAXIMUM EXPERIENCED CONCENTRATION, SEE TABLE 1, NO. 4.

REQUESTED MAXIMUM, 5,700 MILLIGRAMS PER LITER, FOR TOTAL DISSOLVED SOLIDS, WAS THE EXPERIENCED MAXIMUM CONCENTRATION, TABLE 1, NO. 38. THE AVERAGE TOTAL DISSOLVED SOLIDS CONCENTRATION, 5,000 MILLIGRAMS PER LITER, WAS THE AVERAGE PLUS ONE STANDARD DEVIATION, SEE FIGURE 3.

TABLE 3 SHOWED THE TABULATED DATA FOR 19 DAYS OF ANALYSIS FOR A PERIOD FROM APRIL 19, 1971 THROUGH MAY 22, 1973, FOR THE PARAMETERS TOTAL CHROMIUM, COPPER, AND ZINC IN THE INFLUENT RAW LAKE ERIE WATER TO THE PLANT AND EFFLUENT TREATED WASTE WATER DISCHARGE.

5. DISCHARGES: TOTAL CHROMIUM, COPPER, AND ZINC

TABLES 3, 4, AND 5 WERE PREPARED TO DEMONSTRATE THE REASONS FOR THE REQUESTED PARAMETER LIMITS.

TABLE 3 SHOWED THE SUM TOTAL OF DATA FOR THE CONCENTRATION OF TOTAL CHROMIUM, COPPER, AND ZINC INFLUENT INTO AND EFFLUENT FROM THE PLANT. FOR THE EFFLUENT WASTE WATER DISCHARGED, THE AVERAGE CONCENTRATION, MILLIGRAMS PER LITER, WERE 0.046, 0.054, AND 0.047 WITH MAXIMUMS OF 0.17, 0.3, AND 0.3 FOR TOTAL CHROMIUM, COPPER, AND ZINC RESPECTIVELY.

TABLE 4 DEMONSTRATED THE EFFECT OF AN INCREASE OF TOTAL CHROMIUM, COPPER, AND ZINC INFLUENT INTO THE PLANT WITH INCREASED INFLUENT WATER. IT WAS NOTED FROM THE MINIMUM INFLUENT WATER, SEPTEMBER, 1972 TO THE MAXIMUM INFLUENT WATER, JANUARY, 1973, THE PLANT SUSTAINED AN INCREASE OF 25.0%, 18.2%, 26.3% TOTAL CHROMIUM, COPPER, AND ZINC RESPECTIVELY, IN POUNDS PER DAY INFLUENT.

TABLE 5 TABULATED THE CALCULATIONS FOR EFFLUENT FLOW VERSUS EACH PARAMETER. AVERAGE DISCHARGE FOR EACH PARAMETER, POUNDS PER DAY, WAS CALCULATED USING THE MEAN FLOW, 463 GALLONS PER MINUTE, AND AVERAGE CONCENTRATION, TABLE 3, RESULTING IN 0.25, 0.30, AND 0.26

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POUNDS PER DAY FOR TOTAL CHROMIUM, COPPER, AND ZINC RESPECTIVELY. THE MAXIMUM ONE-DAY DISCHARGE WAS CALCULATED USING AN EXPERIENCED MAXIMUM FLOW, ONE GALLONS PER MINUTE, AND THE AVERAGE CONCENTRATIONS (TABLE 3) RESULTING IN 0.49, 0.58, AND 0.50 POUNDS PER DAY FOR TOTAL CHROMIUM, COPPER, AND ZINC RESPECTIVELY.

6. CONCENTRATIONS: TOTAL CHROMIUM, COPPER, AND ZINC

REQUESTED AVERAGE CONCENTRATIONS, MILLIGRAMS PER LITER, FOR THE PARAMETERS WERE THE AVERAGE FOR EACH PARAMETER IN THE EFFLUENT FROM TABLE 3.

MAXIMUM CONCENTRATIONS REQUESTED WERE 0.1 MILLIGRAMS PER LITER FOR EACH, TOTAL CHROMIUM, COPPER, AND ZINC, AND NOT THE MAXIMUMS EXPERIENCED, 0.17, 0.3, AND 0.3 MILLIGRAMS PER LITER FOR TOTAL CHROMIUM, COPPER, AND ZINC RESPECTIVELY, TABLE 3.

VERY TRULY YOURS,

SHERWIN-WILLIAMS CHEMICALS


C. R. SADLER
SUPERVISOR
ENGINEERING SERVICES GROUP

CRS/ca

CC: MR. ROBERT D. LUSS
MR. STASYS V. RASTONIS
U. S. ENVIRONMENTAL PROTECTION
AGENCY - REGION V
ONE, NORTH WACKER DRIVE
CHICAGO, ILLINOIS 60606

ATTACHMENTS

BCC: A. C. THOMAS
C. G. BRETT
F. C. GAUGHAN
H. L. BERKOWITZ
G. F. WYMAN

SCM

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TABLE 1

DISCHARGES: TOTAL SUSPENDED SOLIDS AND TOTAL DISSOLVED SOLIDS

No.	EFFLUENT FLOW		TOTAL SUSPENDED SOLIDS		TOTAL DISSOLVED SOLIDS	
	GAL. MIN.	MG.	MG. LITER	LBS. DAY	MG. LITER	LBS. DAY
1	390	516,600	7	32.8	3,755	17,587
2	376	541,440	1	4.5	3,890	17,566
3	377	542,880	0	0	5,402	24,458
4	350	504,000	3	12.6	4,869	20,466
5	363	522,720	17	74.1	4,611	20,102
6	515	741,600	3	18.6	4,506	27,869
7	490	705,600	5	29.4	3,907	22,992
8	400	576,000	1	4.8	3,808	18,293
9	530	763,200	11	70.0	4,409	28,064
10	480	691,200	8	46.1	4,983	28,725
11	495	712,800	2	11.9	3,821	22,714
12	500	720,000	1	6.0	5,007	30,066
13	700	1,080,000	6	50.4	3,341	28,087
14	510	734,400	2.4	14.7	3,728	22,834
15	390	516,000	6.4	30.0	3,805	17,822
16	490	705,600	3	17.6	4,647	27,346
17	530	763,200	4	25.5	5,441	34,632
18	405	583,200	1.6	7.8	5,011	24,373
19	495	712,800	1.2	7.1	4,307	25,604
20	560	806,400	8	53.8	4,471	30,069
21	510	734,400	3.2	19.6	4,122	25,247
22	570	820,800	2	13.7	4,304	29,463
23	490	705,600	1.6	9.4	3,816	22,456
24	500	720,000	2	12.0	5,230	30,264
25	420	604,800	1.6	8.1	5,040	25,422
26	420	604,800	2.8	14.1	3,500	17,654
27	380	547,200	1.6	7.3	4,845	22,111
28	400	576,000	0.4	1.9	4,500	21,617
29	290	417,600	2.8	9.8	941	3,227
30	420	604,800	2.0	10.1	5,127	25,861
31	460	662,400	4.4	24.3	5,519	30,489
32	420	604,800	4	20.2	4,750	23,959
33	480	691,200	4.4	25.4	4,090	22,577
34	390	561,600	0.8	3.7	4,942	23,147
35	600	864,000	4.8	34.6	5,317	38,313
36	390	516,000	3.2	15.0	5,591	26,187
37	150	216,000	7.2	13.0	1,402	2,526
38	890	1,281,600	2	21.4	5,730	61,245
AVERAGE	461	664,100	3.7	20.6	4,381	24,810
HIGH	890	1,281,600	17.0	74.1	5,730	61,245
LOW	150	216,000	0	0	941	2,526

000479

TABLE 2

COMPARISON OF REQUESTED LIMITS WITH CALCULATION OF PROBABLE PROJECTED LIMITS

<u>EFFLUENTS CHARACTERISTICS</u>	<u>EFFLUENT FLOW</u>		<u>DISCHARGE LIMITATIONS LBS. PER DAY</u>		<u>CONCENTRATION LIMITATIONS MG/LITER</u>	
	<u>GALS/MIN</u>	<u>GALS/DAY</u>	<u>AVERAGE</u>	<u>MAXIMUM</u>	<u>AVERAGE</u>	<u>MAXIMUM</u>
<u>REQUESTED</u>						
TOTAL SUSPENDED SOLIDS			40	75	8	17
TOTAL DISSOLVED SOLIDS			31,000	38,000	5,000	5,700
<u>CALCULATED</u>						
TOTAL SUSPENDED SOLIDS	890 463	1,281,600 666,720		74.8	7 7	
TOTAL DISSOLVED SOLIDS	710 597	1,022,400 859,680		37,100	4,350 4,350	

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TABLE 3

COMPARISON OF CONCENTRATIONS OF TOTAL CHROMIUM (Tot. Cr.), COPPER (Cu), AND ZINC (Zn)

No.	SAMPLE DATE	INFLUENT TO PLANT RAW LAKE ERIE WATER CONCENTRATION MG/LITER			EFFLUENT FROM PLANT TREATED WASTE WATER CONCENTRATION MG/LITER		
		Tot.Cr.	Cu	Zn	Tot.Cr.	Cu	Zn
1	4-19-71*	< 0.02	< 0.04	< 0.04	0.11	< 0.04	< 0.04
2	4-20-71*	< 0.02	< 0.04	< 0.04	0.03	< 0.04	< 0.04
3	4-21-71*	< 0.02	< 0.04	< 0.04	< 0.02	< 0.04	< 0.04
4	3-25-71	< 0.01	0.01	< 0.01	0.10	0.3	0.3
5	8-16-71				< 0.01	0.2	< 0.01
6	8-27-71				< 0.01	0.02	< 0.01
7	10-28-72				0.03	0.01	0.03
8	10-29-72				0.02	0.02	0.02
9	10-30-72				< 0.01	0.02	0.04
10	11-2-72	< 0.01	0.02	0.08			
11	1-7-73	0.016	0.014	0.043	0.040	0.003	0.021
12	1-9-73	0.006	0.014	0.041	0.024	0.025	0.034
13	1-17-73	0.014	0.012	0.034	0.074	0.032	0.021
14	4-19-73	< 0.02	0.01	0.01	0.04	0.02	0.07
15	4-26-73	< 0.02	0.01	0.02	0.02	0.12	0.03
16	5-4-73	< 0.02	0.01	0.03	< 0.02	0.01	0.07
17	5-11-73	0.01	0.01	0.01	0.02	0.01	0.03
18	5-18-73	0.01	0.02	0.05	0.03	0.04	0.01
19	5-22-73	0.01	< 0.01	0.01	0.17	0.02	0.03
	AVERAGE	0.014	0.018	0.032	0.046	0.054	0.047
	MAXIMUM	< 0.020	< 0.040	0.050	0.17	0.3	0.3
	MINIMUM	0.006	< 0.010	< 0.010	0.01	0.01	< 0.01

* SAMPLE ANALYSIS AND RESULTS FURNISHED BY U.S.E.P.A., WILLIAM L. WEST, OHIO DISTRICT OFFICE, CLEVELAND, OHIO.

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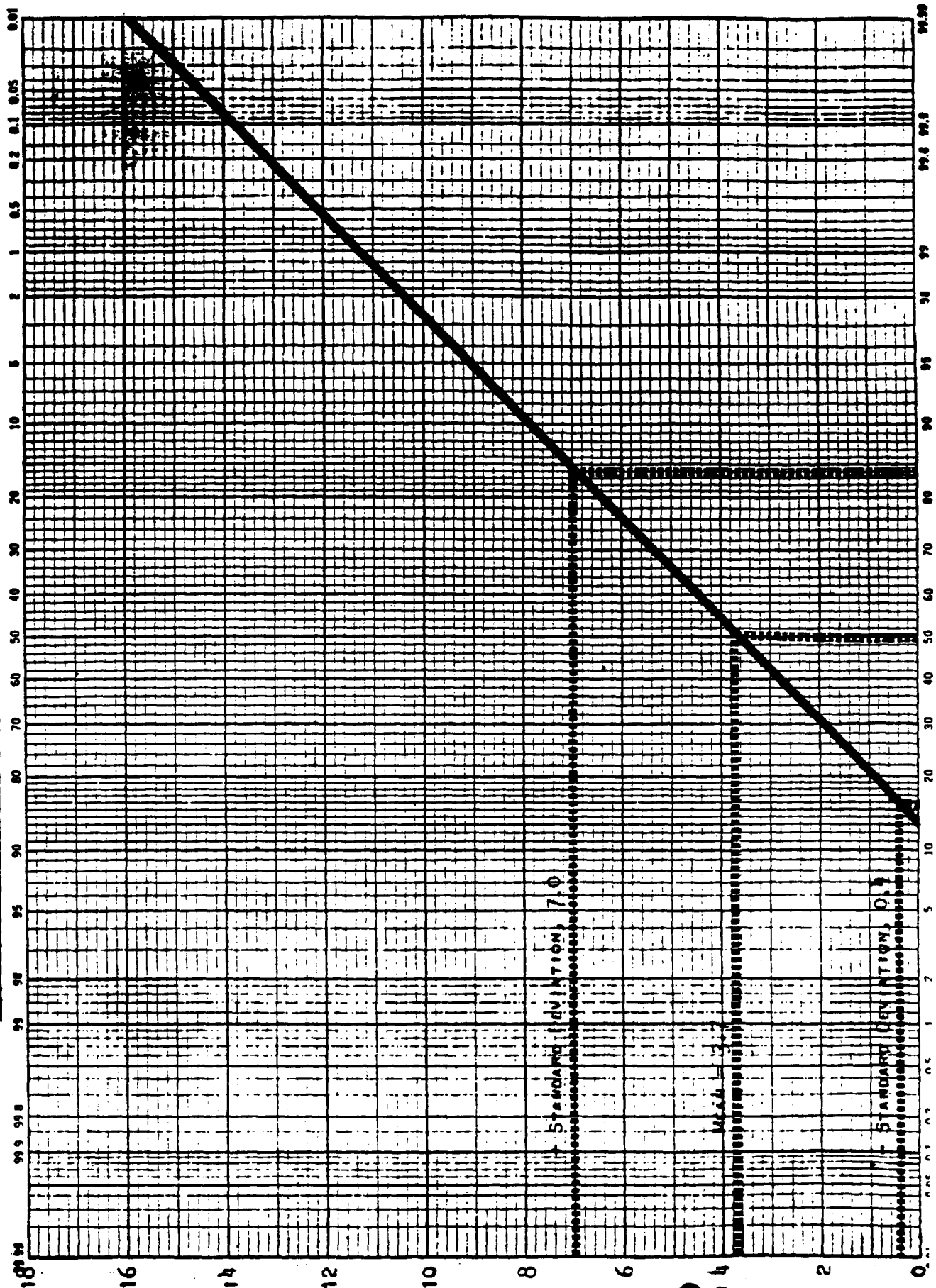
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EUGENE DIETZEN CO.
MADE IN U. S. A.

NO. 140-PJ 90 DIETZEN GRAPH PAPER
PROBABILITY X 90 DIVISIONS

FIGURE 2

CONCENTRATION (MG/LITER) OF TOTAL SUSPENDED SOLIDS VERSUS PROBABILITY



GRAMS PER LITER TOTAL SUSPENDED SOLIDS

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RECEIVED

JAN 11 1974

THE SHERWIN-WILLIAMS CO.
21 E. RILEY

CERTIFIED MAIL
ATURE RECEIPT REQUESTED

Mr. G. F. Schlaudecker
The Sherwin-Williams Company
141 Prospect Avenue, N.W.
P. O. Box 6027
Cleveland, Ohio 44101

RE: NEEDS PERMIT
No. OH 1006923

Dear Mr. Schlaudecker:

Your application OH 070 DXY 2 030305 for a National Pollutant Discharge Elimination System (NPDES) Permit has been processed in accordance with Sections 402 and 403 of the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 16, 1972, (33 U.S.C. Section 1271 et. seq.).

The enclosed NPDES Permit applies to your operations which discharge into fieldsbrook at Ashmudale, Ohio.

All discharges authorized from this facility shall be consistent with the terms and conditions of this permit.

Very truly yours,

ORIGINAL SIGNED BY JAMES O. McDONALD
JAMES O. McDONALD, Director
Enforcement Division

Enclosure
Permit

cc: Ira L. Madison, P.E.
Director, Ohio EPA, w/Permit

cc: A. Printz, Dir., OP, w/encl.
Bq., Effluent Guidelines Div., w/encl.
G. F. Wyman, Sherwin-Williams Chemical Div., w/encl.

1-11-74: HLT (2)

HLB has copy of GFS

CHG-
CRS
HGC
FT

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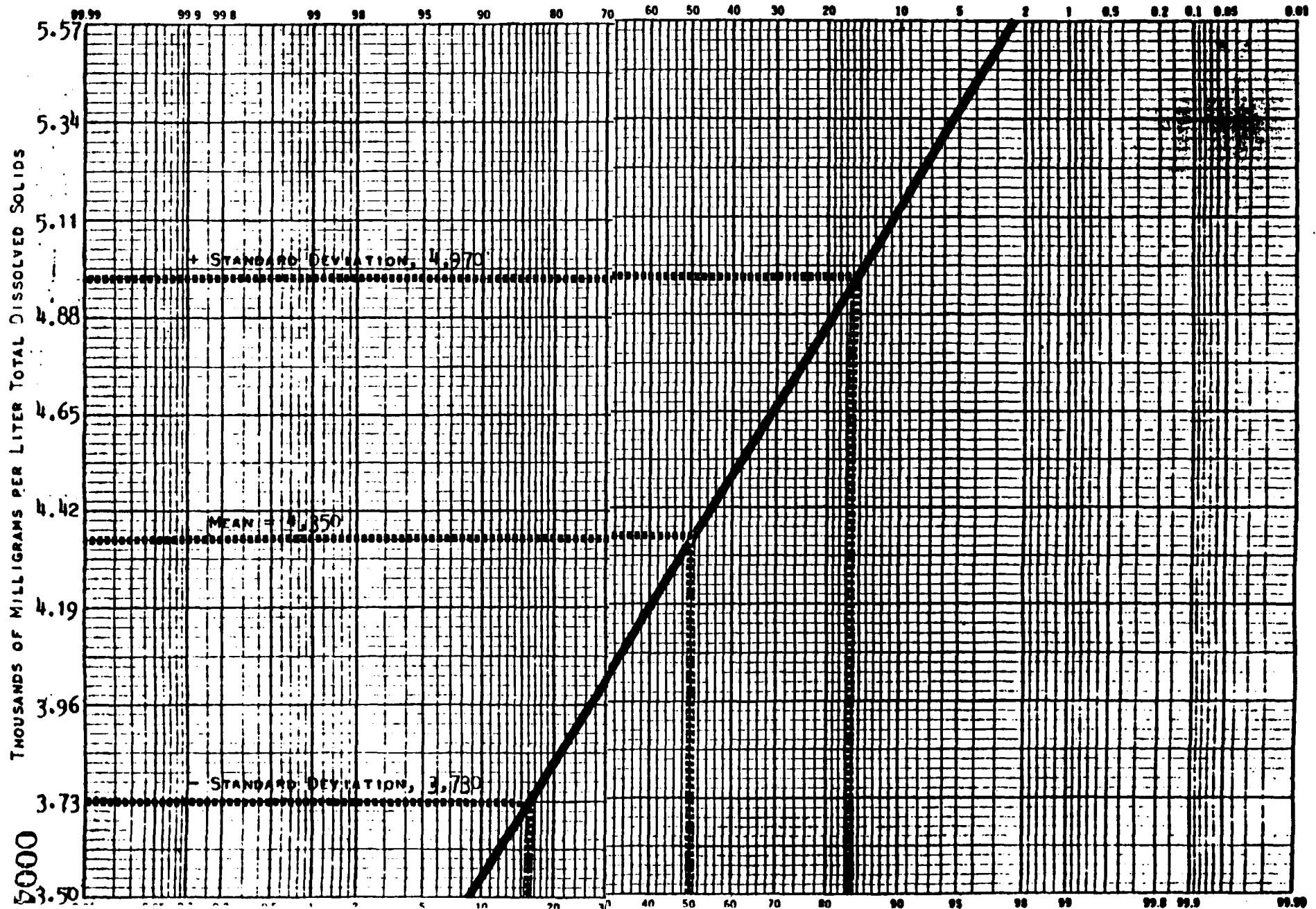
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NO. 340-PS 90 DIETZGEN GRAPH PAPER
PROBABILITY X 90 DIVISIONS

EUGENE DIETZGEN CO.
MADE IN U. S. A.

FIGURE 3

CONCENTRATION (MG/LITER) OF TOTAL DISSOLVED SOLIDS VERSUS PROBABILITY



RECEIVED

JAN 11 1974

ERIC SHERWIN-WILLIAMS CO.
T. C. GILLEN

Permit No. OH 0000523

Application No. OH 070 0X2 2 000205

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq ; the "Act"),

Sherwin-Williams Chemicals Division

is authorized to discharge from a facility located at

Middle Road
P. O. Box 310
Ashtabula, Ohio

to receiving waters named Fields Brook

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective 30 days after the date of issuing authority's signature.

This permit and the authorization to discharge shall expire at midnight, September 1, 1978. Permittee shall not discharge after the above date of expiration. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information, forms, and fees as are required by the Agency authorized to issue NPDES permits no later than 180 days prior to the above date of expiration.

Signed this

JAN 7 1974

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Director, Enforcement Division

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PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date the permittee is authorized to discharge from outfall(s) serial number(s) and lasting until September 1, 1978

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day	(lbs/day)	Other Units (Specify)		Measurement	Sample
	Daily Avg	Daily Max	Daily Avg	Daily Max	Frequency *	Type
Flow-M ³ /Day (MGD)	-	-	-	-	Continuous Recording	
TSS	23(50)	50(110)	8.0 mg/l	17 mg/l	2xMonthly	Composite
TDS	15000(33000)	17000 (38000)	5000 mg/l	5700 mg/l	2xMonthly	Composite
Chromium	0.14 (0.3)	0.28(0.6)	0.06 mg/l	0.1 mg/l	2xMonthly	Composite
Copper	0.14 (0.3)	0.28(0.6)	0.06 mg/l	0.1 mg/l	2xMonthly	Composite
Zinc	0.14 (0.3)	0.28(0.6)	0.06 mg/l	0.1 mg/l	2xMonthly	Composite
Chlorine Residual	N/A	N/A	0.1 mg/l	0.3 mg/l	2xMonthly	Grab
Temperature	N/A	N/A	N/A	N/A	2xMonthly	Record of Max.

*See Part III

2. The pH shall not be less than 6.0 nor greater than 9.0 and shall be monitored continuous recording.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): prior to final discharge.

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PART B

(Office use only)

Discharge Serial No.

000205-004

B-2. CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge										
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	METHOD OF ANALYSIS	CONTINUOUS MONITORING	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ACIDITY (as CaCO ₃) 00435	W 10	10	ND	ND	ND				A	O	S A
TOTAL ORGANIC CARBON (T.O.C.) 00680	6.0	29	37	44.3822	44.3822	37.00	6.7806	A	O	S	A
TOTAL HARDNESS 00900	W 85.9	118.66	76.6	0.011	0.011	76.6	0.00168	A	O	S	A
NITRITE (as N) 00615	< 0.001	0.005	0.006	0.0072	0.0072	0.006	0.0011	A	O	S	A
ORGANIC NITROGEN 00605	W 0.65	< 0.0500	< 0.500	< 0.5998	< 0.5998	< 0.50	< 0.0916	A	O	S	A
PHOSPHORUS-ORTHO (as P) 70507	0.065	0.003	0.130	0.1559	0.1559	0.130	0.0238	A	O	S	A
SULFATE 00945	4.3	5.2	10.0	11.9952	11.9952	10.0	1.8326	A	O	S	A
SULFIDE 00745	0.002	0.014	0.019	0.0228	0.0228	0.0190	0.0035	A	O	S	A
SULFITE 00740	< 0.1	0.8	1.20	1.4394	1.4394	1.20	0.2199	A	O	S	A
BROMIDE 71870	W 0.44	< 0.01	< 0.01	< 0.0120	< 0.0120	< 0.010	< 0.0018	A	O	S	A

PART B

(Office use only)

Discharge Serial No.

000205-004

B-2. (cont.)

CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge										
PARAMETER AND CODE	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	SAMPLE FREQUENCY	METHOD OF ANALYSIS	CONTINUOUS MONITORING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
CHLORIDE 00940	21	20	32.0	38.3846	38.3846	32.00	5.8643	A	O	S	A
CYANIDE 00720	0.063	0.0111	0.086	0.1032	0.1032	0.0860	0.0158	A	O	S	A
FLUORIDE 00951	✓ 0.15	1.4	0.1850	0.2219	0.2219	0.1850	0.0339	A	O	S	A
ALUMINUM-TOTAL 01105	0.06	0.06	0.300	0.3599	0.3599	0.300	0.0550	A	O	* ES (F)	A
ANTIMONY-TOTAL 01097	<0.05	<0.01	<0.100	<0.1200	<0.1200	<0.100	<0.0183	A	O	ES	A
ARSENIC-TOTAL 01002	✓ <0.1	<0.10	<0.100	<0.1200	<0.1200	<0.100	<0.0183	A	O	ES	A
BARIUM-TOTAL 01007	✓ <0.01	<0.01	<0.010	<0.0120	<0.0120	<0.0100	<0.0018	A	O	ES	A
BERYLLIUM-TOTAL 01012	✓ <0.01	<0.01	<0.0100	<0.0120	<0.0120	<0.0100	<0.0018	A	O	ES	A
BORON-TOTAL 01022	✓ 0.04	<0.01	<0.0100	<0.0120	<0.0120	<0.0100	<0.0018	A	O	ES	A
CADMIUM-TOTAL 01027	✓ <0.05	<0.05	<0.050	<0.0600	<0.0600	<0.0500	0.0092	A	O	ES	A

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TABLE 4

MONTH	INFLUENT WATER TO THE PLANT RAW LAKE ERIE WATER		AVERAGES FOR PARAMETERS INFLUENT WATER TO PLANT RAW LAKE ERIE WATER					
	M-GALS MONTH	DAYS MONTH	TOTAL CHROMIUM		COPPER		ZINC	
			Mg LITER	LBS DAY	Mg LITER	LBS DAY	Mg LITER	LBS DAY
SEPT., 72	21,546	30	0.014	0.08	0.018	0.11	0.032	0.19
OCT., 72	22,557	31	0.014	0.08	0.018	0.11	0.032	0.19
JUNE, 73	23,033	30	0.014	0.09	0.018	0.12	0.032	0.20
NOV., 72	23,515	30	0.014	0.09	0.018	0.12	0.032	0.21
MAY, 73	24,515	31	0.014	0.09	0.018	0.12	0.032	0.21
FEB., 73	24,641	28	0.014	0.10	0.018	0.13	0.032	0.23
DEC., 72	25,298	31	0.014	0.09	0.018	0.12	0.032	0.22
APRIL, 73	25,581	30	0.014	0.10	0.018	0.13	0.032	0.23
MARCH, 73	27,040	31	0.014	0.10	0.018	0.13	0.032	0.23
JAN., 73	27,825	31	0.014	0.10	0.018	0.13	0.032	0.24
MAXIMUM INFLUENT				0.10		0.13		0.24
MINIMUM INFLUENT				0.08		0.11		0.19
NET DIFFERENCE				0.02		0.02		0.05
% INCREASE OVER MINIMUM				25.0		18.2		26.3

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TABLE 5

VARIATION OF POUNDS PER DAY OF (1) TOTAL CHROMIUM, (2) COPPER, AND (3) ZINC AS THE RESULT OF ONE DAY'S EFFLUENT FLOWS IN GALLONS PER MINUTE:

PARAMETERS IN POUNDS PER DAY FOR AVERAGE CONCENTRATIONS IN THE PLANT EFFLUENT

DAILY FLOW DATA IN GALLONS PER MIN.	TOTAL CHROMIUM		COPPER		ZINC	
	MG	LBS	MG	LBS	MG	LBS
	LITER	DAY	LITER	DAY	LITER	DAY
MAXIMUM, 890	0.046	0.40	0.054	0.58	0.047	0.50
AVERAGE, 463	0.046	0.25	0.054	0.30	0.047	0.26

REQUESTED LIMITATIONS FOR PARAMETERS
TOTAL CHROMIUM, COPPER, AND ZINC.

REQUESTED LIMITATIONS	DISCHARGE LBS/DAY		CONCENTRATION MG/LITER	
	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE
TOTAL CHROMIUM	0.6	0.3	0.1	0.06
COPPER	0.6	0.3	0.1	0.06
ZINC	0.6	0.3	0.1	0.06

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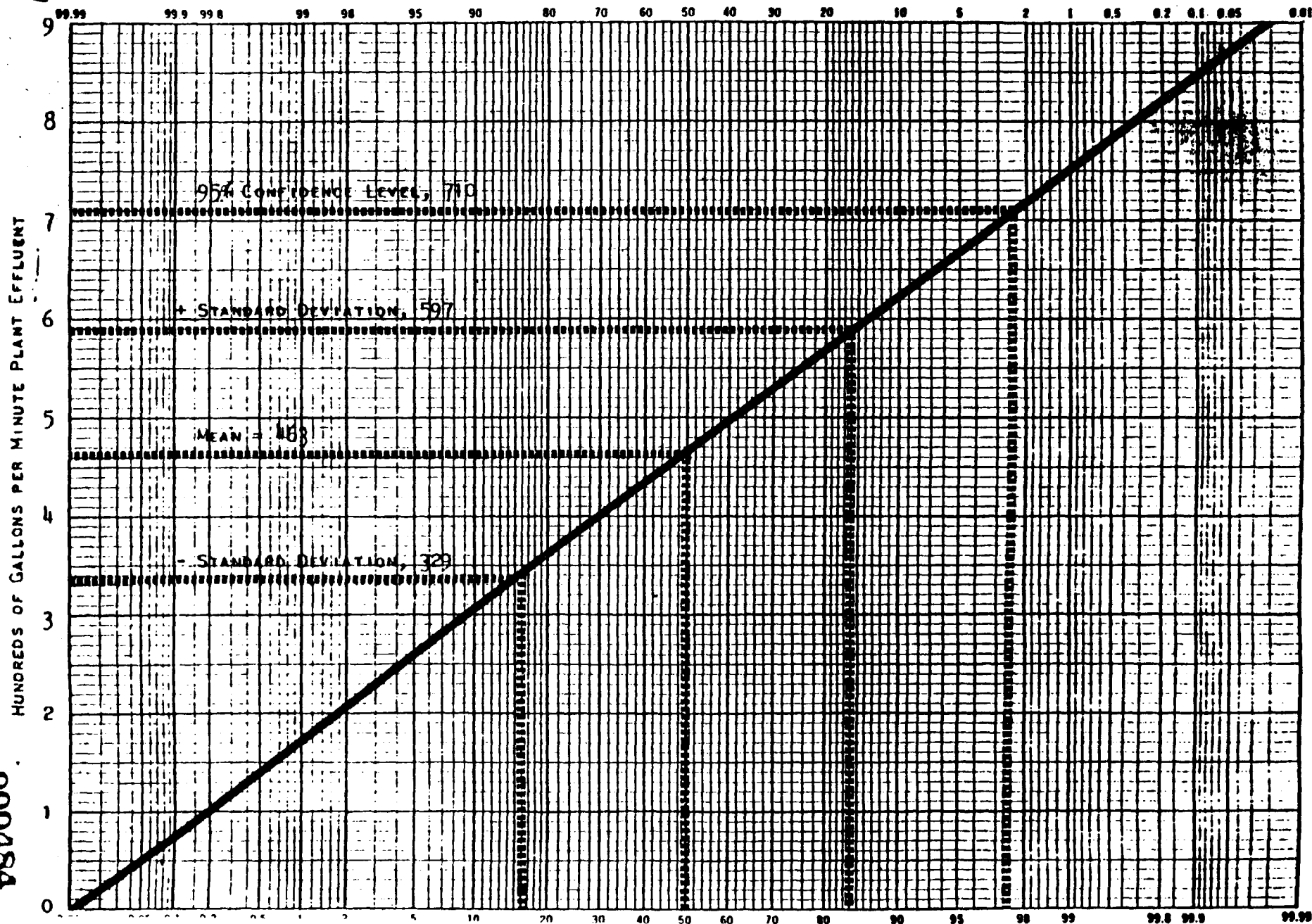
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NO. 340-PS 90 DIETZGEN GRAPH PAPER
PROBABILITY X 90 DIVISIONS

EUGENE DIETZGEN CO.
MADE IN U. S. A.

FIGURE 1

PLANT EFFLUENT FLOW, GALLONS PER MINUTE, VERSUS PROBABILITY



000484

PART A

(Note: Submission of Part A is required of all applicants whose processes are listed on page 3 above.)

(Office use only)

000201

Discharge Serial No.
001

INFORMATION REQUIRED OF SPECIFIED INDUSTRIES

Intake	Discharge (6) Addendum										
PARAMETER AND CODE	DAILY AVG. CONCENTRATION (1)	DAILY AVG. CONCENTRATION (2)	MAXIMUM CONCENTRATION (3)	MAXIMUM POUNDS PER DAY (4)	DAILY AVG. CONCENTRATION (5)	AVERAGE POUNDS PER DAY (6)	SAMPLE TYPE (7)	SAMPLE FREQUENCY (8)	METHOD OF ANALYSIS (9)	CONTINUOUS MONITORING (10)	(11)
ALKALINITY (as Ca CO ₃) 00410	94	(7) Addendum (35)	73	3.63	267	59	188	COMP	DYLY	Std Method	AB
B.O.D. 5-DAY 00310	4	4	7	0.35	25	4	13	COMP	DYLY	Std Method	AB
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340	< 10	< 10	67	3.41	242	60	191	COMP	DYLY	Std Method	AB
TOTAL SOLIDS 00500	325	325	4724	241.0	17050	4665	14900	COMP	DYLY	Std Method	AB
TOTAL DISSOLVED SOLIDS 70300	300	300	4717	240.0	17040	4661	14850	COMP	DYLY	Std Method	AB
TOTAL SUSPENDED SOLIDS 00530	25	25	7	0.35	25	4	13	COMP	DYLY	Std Method	AB
TOTAL VOLATILE SOLIDS 00505	94	94	88	4.47	317.	80	255	COMP	DYLY	Std Method	AB
AMMONIA (as N) 00610	< 0.5	< 0.5	< 0.5	0.03	2	< 0.5	6	COMP	DYLY	Std Method	AB
KJELDAHL NITROGEN 00625	0.5	0.5	0.5	0.03	2	0.3	6	COMP	DYLY	Std Method	AB
NITRATE (as N) 00620	< 1	< 1	1.4	0.07	5	1.0	16	COMP	DYLY	Std Method	AB
PHOSPHORUS TOTAL (as P) 00665	< 0.2	< 0.2	< 0.2	0.01	1	< 0.2	4	COMP	DYLY	Std Method	AB

file

Diamond Shamrock

52

19-5L46-0/00205

March 2, 1976

Mr. Willard Samkow, District Engineer
Ohio EPA, Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Re: Semi-Works, Ashtabula, Ohio
NPDES Permit No. F302*BD
Permit Effluent Limitation
Excursions Notification

Dear Mr. Samkow:

In compliance with the terms of the Semi-Works permit, we must inform you of the following permit effluent limitations excesses:

Sample Date, 1976

February 23

Suspended Solids

<u>Mg/l</u>	<u>Kg/Day</u>
118	301

Dissolved Solids, Mg/l

February 22

3074

February 24

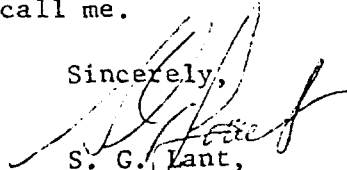
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The excess dissolved solids discharges were caused by addition of excess sodium sulfite and sodium hydroxide, added both manually and through the automatic effluent residual chlorine control system. Although effective effluent residual chlorine control was maintained, the control chemicals caused the temporary high effluent dissolved solids discharges. The reasons for the high untreated process waste water residual chlorine content both days is not fully understood, but it is under investigation.

The excess suspended solids discharge was caused when a settling pond effluent control valve was opened too much, and the water flow carried out excess settled solids. The cooling tower fan failed about 4:00 a.m. on February 22, and was restored to service about 9:00 a.m. that same morning. During those five hours, it was necessary to use about 300,000-400,000 gallons of cooling water on a once-through basis. This water was totally retained in a settling pond at the plant. On February 23, the settling pond valve was opened to drain out the collected cooling water, blending this water with the normal plant discharge. Effluent tests later showed that the pond water was discharged too quickly, carrying out previously settled solids. In the future, the settling pond will be drained more slowly.

If you have any questions, please call me.

Sincerely,



S. G. Lant,

Regional Environmental Control Manager

SGL:mk

Diamond Shamrock Corporation

1100 Superior Avenue, Cleveland, Ohio 44114 • 216/694-5000

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